A HEAVY PRICE TO PAY
ATTACKS ON HEALTH CARE SYSTEMS IN SYRIA 2015-2021

May 2022
Cover:
Damage in the OR after Two rounds of direct airstrikes at Al-Ma’ara hospital. Ma’arrat an Nu’man city - Idlib governorate, Apr 2017

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The Syrian American Medical Society (SAMS) was founded in 1998 as a professional society to provide networking and educational opportunities to medical professionals of Syrian descent across the United States. The charitable arm of SAMS, SAMS Foundation, was launched in 2007. With the eruption of the conflict in Syria, SAMS Foundation has become one of the most active medical relief organizations working on the frontlines of crisis relief in Syria, neighboring countries, and beyond.

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OUR MISSION...
is dedicated to delivering life-saving services, revitalizing health systems during crisis, and promoting medical education via a network of humanitarians in Syria, the US, and beyond.

OUR VISION...
is to strengthen the future of Syria’s healthcare, delivering dignified medical relief where needed, fortified by a dedicated medical community.
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It has been a difficult 11 years ...

Soon after the beginning of the civil demonstrations in Syria in March 2011, violence has started to unfold very quickly, mainly against civilians, the need to provide health care has quickly become a primary concern, as for SAMS, the response came out very early, sending medical missions, supporting and retaining medical staff, establishing health care facilities to replace the ones who were suspended, or in areas where massive displacement occurs.

Health staff and health facilities were not exempted; health care workers who were trying to save lives were arrested, detained, and tortured, and unlawful attacks against health facilities have started. A grave violation of international humanitarian law, health staff were killed and injured, patients as well, and everyone was terrified. We have refused to believe at the beginning that such incidents could happen in an era where everyone can see what is happening in real-time, thanks to the advances in communication technology.

We thought the international community would quickly move to hold perpetrators of these horrific attacks on health accountable. Years passed, and the atrocities have become so many that we were unable to count how many hospitals and staff were bombed! And yet, no meaningful acts to stop the attacks have been made.

Slowly, however, we realized, we were on our own, and accountability is not going to happen anytime soon, and if we want it to be achieved someday, we will have to start working on documenting every single incident that happened against our health staff. Of course, we were unable to fully cover all atrocities that we were subjected to due to the amount that had occurred, other partners and organizations could, we are complementing what they were missing, and adding to the overall evidence, with full hope that justice will be achieved.

This document provides a testimony of a single health organization, in one of the deadliest conflicts of the 21st century, in an attempt to demonstrate the horror that Syrian health care, patients, and the communities had witnessed in the last few years, due to the attacks on health care in Syria, and provide a basis to serve the cause of accountability. We owe that to our patients, our colleagues, and to all Syrians.

Access to healthcare is a human right, and we will do our best to defend it, in Syria, and beyond.

DR. AMJAD RASS
PRESIDENT OF THE SYRIAN AMERICAN MEDICAL SOCIETY
A heavy price to pay
EXECUTIVE SUMMARY

Since the start of the conflict in Syria, the world has witnessed the distressing reality of how perpetrators of violence have systematically targeted healthcare systems in Syria, a now well-documented and substantial reality of the conflict. Alongside immediate destruction that this causes on people and healthcare systems, this also means that healthcare systems have all too often been prevented from offering treatment to patients and their communities.

The Syrian American Medical Society (SAMS) - a global medical relief organization working on the front lines of crisis relief in Syria - has always called for accountability for any perpetrator who carried out any attacks in violation of their international legal obligations. They have also gathered years of data on attacks on healthcare systems. A Heavy Price to Pay presents this data collected by SAMS on attacks on healthcare systems in Syria in an attempt to support any future mechanism for accountability on this issue. The data it has collected includes incidents impacting its own facilities and data SAMS has gathered on other incidents that impacted non-SAMS systems. In 2021, SAMS built a unified database of these incidents which included verifying credibility, expanding on details where needed, correcting and coding information, reviewing coordinates for the attacked facilities, and matching media files with their respective incident reports. After the process of cleaning, the data was then analyzed through a legal lens.

What this report has done is explored this data in the context of international humanitarian law, and, by utilizing the data SAMS has collected, this report shows that there is an urgent need for investigators to explore further were crimes against humanity or war crimes have taken place.

1. KEY FINDINGS

Utilizing concerns that international humanitarian law presents, there are several key findings that A Heavy Price to Pay presents. The most substantial information that came out of SAMS data was the scale of impact that these attacks have had. Attacks that lead to extensive destruction of property of protected facilities are a grave breach of international law, and destruction of property - and life - has been a large component of the attacks in Syria. The most poignant data has been the loss of life and injury that has been documented. In the SAMS data, a total number of 480 individuals - 123 medical staff and 357 patients - have sadly lost their lives in the documented attacks. 56 of those were children. In addition to death, 1268 individuals - 318 medical staff and 950 patients - have been injured. 137 of those were children. This is unfortunately unsurprising given the scale of the attacks. SAMS data analyzed in this report includes a total of 674 attacks, which include 222 impacted health centers in addition to 29 destroyed mobile facilities, and 159 ambulance vehicles. It is important to note also that many facilities were attacked more than once. SAMS data on the infrastructural damage to healthcare systems during the attacks also suggest that over 61% of attacks resulted in the healthcare systems being partially damaged, whilst over 6% of the incidents resulted in total damage.

In addition to loss and destruction, other components of the SAMS data were analyzed. The essential question explored - which is a question that remains - is whether the alleged perpetrators had knowledge that the facility was protected under international humanitarian law as non-combatant spaces and personnel. This would be a fundamental component of viewing these attacks as international crimes. What the SAMS database did record was that 27 direct attacks were carried out on deconflicted facilities and that these attacks affected a total of 23 facilities. 5 facilities that were on the deconfliction list were attacked directly more than once. Another 6 of the health facilities that were attacked, were so both before and after they were put on the deconfliction list. suggesting that their clear protected status did not prevent the continuation of attacks on them. In addition, many of the SAMS facilities that were attacked were well known health facilities, even before the conflict began.
Further, whether the intention of the alleged perpetrator was to target the facility was also explored. It would be necessary to fully understand the dynamics of fighting in the area before each attack to fully understand the intention, however some patterns in the data suggest that alleged perpetrators potentially did target the facility. For instance, SAMS data shows that witnesses to the incidents have documented 354 attacks were directed at the healthcare system - which compromises the majority of incidents. In addition, some of the healthcare facilities were attacked a substantial number of times. For instance, Al-Sakhour hospital – a well-established and well-known healthcare facility in the Eastern Aleppo city was attacked 19 times in the space of two years.

The Government of Syria has reportedly stated that healthcare systems they have attacked are in fact used for military purposes, which would mean that they are not protected under international humanitarian law. However, SAMS data recorded shows that SAMS possesses significant information on the medical caseload that the systems have undertaken, the international funding of many of the facilities that were attacked, alongside the plethora of photos and videos that have been compiled by SAMS highlighting that the facilities were being used for medical purposes.

Lastly, even when an entity has forfeited its protected status because it is being used for military purposes, and therefore becomes a legitimate military objective, the perpetrator of an attack is still obliged to give an advance warning that an attack will take place. SAMS data shows that in no incident was there an early warning given to the facility before an attack, even when the attack was directed on the facility.

2. RELEVANCE TO ACCOUNTABILITY

The vast majority of attacks documented in SAMS data have allegedly been carried out by the Government of Syria and its allies - particularly the Government of Russia. In 92% of incidents where witnesses and documenters were able to indicate a specific alleged perpetrator, the alleged perpetrator was purported to be the Syrian or Russian government. This makes it particularly important to ensure investigators analysis this data in the framework of international law, as the government of Syria are utilizing international mechanisms - most notably seen in the last UN Universal Periodic Review of Syria to attempt to justify such attacks.

Despite the scale and impact of attacks against healthcare systems in the SAMS data shown in A Heavy Price to Pay - alongside the data that has been documented by several other healthcare providers - legitimate accountability opportunities are yet to materialize.

The data suggests that attacks on healthcare systems appeared to be normalized and impunity around the frequent - and often repeated - attacks on healthcare systems in Syria has not been honestly addressed.

What is increasingly important is that addressing impunity is not only crucial for achieving justice in Syria, but also for perpetrators to be held accountable to prevent future normalization of such breaches of international law elsewhere. Worryingly, one of the perpetrators allegedly responsible - for 64 (nearly 10%) of attacks presented in this report - the Government of Russia - has begun similar tactics of attacking healthcare systems in Ukraine. The data and analysis offered in A Heavy Price to Pay must be further investigated, explored, and brought forward in mechanisms of accountability to ensure the end to such horrific attacks against healthcare systems in Syria and elsewhere.
RECOMMENDATIONS FOR ACCOUNTABILITY

1. TO THE SYRIAN GOVERNMENT AND ALL PARTIES TO THE CONFLICT

- Immediately cease all attacks on healthcare facilities
- Fulfill obligations to not target civilians, including healthcare systems, as provided for in international humanitarian law
- Provide data, as requested, to bodies collecting evidence on previous attacks on healthcare systems
- Cooperate with processes of accountability and hand over responsibilities in the chain of command of such attacks
- Allow investigation teams from the UN mechanisms to have independent access to evidence and,
- Refrain from issuing statements that healthcare systems that have been attacked are used for military purposes without providing credible evidence on a case-by-case basis
- Within areas of conflict, ensure an early warning system is in place to provide healthcare workers the opportunity to take steps to ensure the protection of civilians before weapons are used
- Assume a responsibility to protect, and ensure facilitation to the right to health in areas under their control, including non-discrimination with regards to distribution and accessibility.

2. TO UN SECURITY COUNCIL MEMBER STATES

- The U.N. Secretary-General should broaden the Board of Inquiry’s focus to investigating and attributing responsibility for all attacks on civilian objects
- The U.N. should carry out in-depth investigations on documented attacks on healthcare to fully establish violations of international law
- The U.N. Secretary-General should provide more resources and support to the IIIM and partners it engages with to effectively collect and analyze evidence of attacks on healthcare systems
- The U.N. Security Council should utilize its diplomatic and political space to increase the protection of healthcare systems
- The U.N. Security Council should pursue criminal prosecutions for such attacks carried out by all entities
- UN monitoring systems should be on the ground and regularly visit health facilities
3. TO INTERNATIONAL DONORS

- Donor governments should work with its stakeholders to strengthen the monitoring of and reporting on attacks on healthcare.
- Donor governments should increase support for duty of care and support those injured and families of those killed in such attacks.
- Donor governments should support coordinated approaches of data on attacks for use by the U.N. Security Council in implementing resolution 2286 on attacks on health care.
- Donor governments should increase support to repair and strengthen destroyed or damaged healthcare systems.
- Donor governments should support the monitoring of medical work and aid delivery.
- Donor governments should encourage efforts to pursue criminal prosecutions for such attacks.

4. TO HEALTHCARE ORGANIZATIONS AND OFFICIALS

- Ensure documentation on attacks on healthcare systems and other violations of IHL are conducted in an effective and transparent way.
- The WHO should to prioritize attacks on healthcare facilities and invest more on standardizing tools of reporting.
- Provide training for staff members on collecting information.
- Work with the IIIM and other accountability mechanisms to improve and offer evidence of attacks on healthcare systems.

5. TO CIVIL SOCIETY

- Support healthcare officials trying to compile evidence on attacks on healthcare systems in an effective and transparent way.
- Collaborate and link the various databases documenting attacks.
- Invest more in training and investigating in the context of International Humanitarian Law Violations.
- Increase engagement and publicity to press for investigations into violations of IHL by all parties in Syria.
“We were having a busy day even though it was still early….. “

I remember there were a few children playing in the room we had dedicated as a safe space. I was leaving them and heading to the garden to find one of the mothers when the attack took place. Honestly, I don’t remember the first moments after the strike. All I remember was finding myself sprawled out on the floor outside in one of the corridors. But then after a few moments I went into reaction mode like a robot. The rest of the day was chaotic, running around, trying to figure out what was going on and what we needed to do to help people and save our hospital. I don’t think what had happened sunk in during the first day.”

On February 2014, at 9.00am, an air to surface missile launched from a jet fighter hit the side of the Al-Sakhour hospital in Jebel Saman, Aleppo district. Witnesses on the ground believe that the hospital was the intended target of the attack, allegedly carried out by the Government of Syria.

Two patients died that day, and five medical staff were injured.

“The day of the attack I did not feel anything. It started to become emotionally difficult in the weeks that followed. I avoided talking to anyone who knew the other victims, what could I say to them? Instead of focusing on our work, we were now forced into focusing on rebuilding infrastructure, starting treatments from the beginning, looking after the injured. All of this with no time to mourn. All of this while in fear that another attack could happen at another time. Angry that we were not being able to provide the services we needed to. The attack caused direct damage to the two main electrical generators, the oxygen generator, and the negative pressure after the explosion caused significant damage to other essential devices in the hospital. As a result of the damage the hospital had to be temporarily closed after the attack.

“Our hospital and its location are well known. It was not hidden. An air to surface missile landed on us that day. There is no way we can ever comprehend how another human can do that.”
INTRODUCTION

For over a decade, the world has witnessed the poignant reality of how perpetrators of violence have systematically targeted healthcare systems in Syria. Attacks on healthcare facilities and personnel and the killing of patients, has unfortunately remained a reality of this conflict. Alongside immediate destruction, this has ultimately meant that healthcare systems have all too often been brutally prevented from extending treatment to patients and their communities.

Attacks on healthcare were prevalent from the very beginning of the conflict in Syria. As various reports have stated, Syria has seen extraordinarily high level of intentional aggression against health workers and facilities.

An increase in attacks brought with it an increase in attempts to collect data by medical personnel and NGOs - despite the post-attack environment being unconducive to data collection. Confronted with such data and witnessing a healthcare system in severe distress, the international community also tried to react.

In 2014 the U.N. adopted Security Council Resolution 2139, which demanded that all parties to the conflict respect the “principle of medical neutrality” - highlighting that healthcare systems are a protected entity - and “facilitate free passage to all areas for medical personnel, equipment, transport and supplies...”.

This resolution is known as the most significant with regard to protecting healthcare systems in Syria, and importantly goes on to insist that “all parties demilitarize medical facilities... and desist from attacks directed against civilian objects.”

Following this, the United Nations developed a deconfliction system to ensure healthcare facilities locations were known and to ensure their protection from attacks in the conflict. Furthermore, the Security Council went on to emphasize the protected status of healthcare systems more and ensuring accountability globally by adopting Security Council Resolution 228610. This 2016 resolution mentions the issue of impunity regarding attacks on healthcare during conflict, specifically that the Security Council “[e]mphasizes the responsibility of States to comply with the relevant obligations under international law to end impunity and to ensure those responsible for serious violations of international humanitarian law are held to account.”

Despite the international response, attacks against healthcare systems continued. Reflecting this, in 2021, the Report of the Independent International Commission of Inquiry on the Syrian Arab Republic discussed potential war crimes that were committed by the Government of Syria with regards to attacks on healthcare systems and announced the establishment of the Independent Senior Advisory Panel on Humanitarian Deconfliction to look at how to strengthen the deconfliction mechanism6.

Despite these initiatives, legitimate accountability opportunities have yet to materialize. The impunity around the regular - and often repeated - attacks on healthcare systems in Syria has not been seriously addressed beyond these initiatives. Addressing impunity is not only necessary for justice in Syria, but another crucial aspect in getting justice for Syria is that perpetrators be held accountable to prevent the normalization of these breaches of international law. Worryingly, one of the perpetrators allegedly responsible for 64 (nearly 10%) of attacks presented in this report - the Government of Russia - has begun similar tactics of attacking healthcare systems in Ukraine - where the World Health Organization has stated that attacks on hospitals, ambulances and other health care facilities in Ukraine increased rapidly in March 2022, with the country running short of vital medical supplies12. Accountability is necessary to prevent such impunity continuing and expanding globally.

The Syrian American Medical Society (SAMS) - a global medical organization working on the front lines of crisis relief in Syria - has repeatedly called for accountability for any perpetrator responsible for carrying out any attacks in violation of international legal obligations.14 This report will seek to present data collected by SAMS on these attacks on the healthcare systems in Syria to support quests for accountability on this issue. The data it has collected includes incidents impacting its own facilities and data SAMS has gathered on other incidents that impacted non-SAMS systems.
It will explore these incidents in the context of international humanitarian law, where the data will be embedded in a discussion on whether the attacks that took place may have violated elements of international law.

This will all be done in the light of encouraging steps towards accountability for the communities affected by these incidents—an essential component of the country moving towards achieving effective remedies for grave violations of international law that have taken place in Syria.

The information that SAMS presents in this report only consists of data collected by SAMS. To get a holistic understanding of the extent of attacks on healthcare systems in Syria, it must be read in context with other substantial data collected by other organizations working to address impunity and continuity of attacks on healthcare systems in the country. These include, for instance, the data and work of Physicians for Human Rights and the Commission of Inquiry15.
SAMS has opened more than 250 healthcare facilities during the conflict, from which they provide medical care to the Syrian community. Since 2014, SAMS has collected evidence on incidents of attacks against healthcare systems on its own facilities, on facilities it supports, and on other NGO facilities. The method in which SAMS staff conduct this data collection has developed significantly throughout the conflict. Currently, the process of documentation of incidents is as follows: In each medical facility there is a focal point who is responsible for contacting the safety and security team in case of any security incident against the facility or any of its staff. An incident report for each incident is then developed. The incident report form (initially developed by the university of John Hopkins for SAMS in 2014) contain all information on the incident: who, what, where, when, a narrative description of the attack, information and assessment of physical damage and information on human casualties. These incident reports were filled by the focal point in early years of the conflict but eventually this responsibility was given to the trained field security officer to ensure more accuracy. The field media team would also take video-photo documentation of the incident whenever accessible. The media team would try and work rapidly before any altering of the site, and they would also collect any CCTV footage which they would share with the Turkey based security staff. The incident report accompanied with the media evidence would then be shared with senior staff and with the relevant board committees, donors and accountability partners. A copy of these documents was also stored at relevant departments.

During 2021, SAMS went through a thorough process of reviewing and building a unified database of these incidents. This included verifying credibility, expanding on details where needed, correcting and coding information, reviewing coordinates for the attacked facilities and matching media files with their respective incident reports. This was a long process that included developing substantive guidelines and data cleaning tools.

The database was also examined by a data analysis expert who further cleaned the data - i.e., ensuring unified terminology for attacks modalities, alleged perpetrators, and the definitions for severity impact. SAMS recorded a total of 786 incidents. The analysis of the data in this report will ensure that it is clear when it is discussing incidents on SAMS healthcare facilities and when it is discussing incidents documented by SAMS on all facilities. Following the process of cleaning the data, the information was presented in a visually accessible way and the legal analysis took place.

In addition, the data analysis expert work resulted in the exclusion of some incidents from this report to ensure that the presentation of information is carried out in a systematic and credible way. 674 records were kept in the data analysis for this report, whilst 112 records were not included in this analysis.

The justifications behind these exclusions are the following:

- 3 records were excluded because they took place in healthcare systems outside of Syria which was not the scope of this analysis.
- 15 records were dropped due to time-frame concerns; towards the start of the conflict, local medical personnel were not yet accustomed to documenting incidents. Under-reporting from the related periods would mislead the timeline analysis, as it would assume fewer attacks took place, rather than those attacks were not documented. One record was dropped from 2013 and 14 records from 2014.
- 23 records were dropped due to the type of record concerns; these were documented incidents of accidents as opposed to attacks.
- 14 records were dropped due to the lack of details on the attack.
- 57 records were removed as they referred to incidents that took place far from the healthcare systems, mostly chemical attacks targeting civilians directly (despite having long-term effects on the healthcare systems, and beyond the scope of this report).

Once cross-matching with other organizations data was finalized, the data was revised by a legal expert. The expert has also suggested a list of 100 incidents where information on attacks was particularly substantial that would be useful for accountability mechanisms to explore further.
REPORT LIMITATIONS

It must be highlighted that this report has certain limited research and analytical scopes which include:

- The number of incidents presented in this report provide a general overview and analysis. An in-depth or full analysis would require analyzing each incident separately considering violations of international humanitarian law. For future accountability mechanisms, each attack must be professionally investigated to ensure the case is built as proficiently as possible. For example, an analysis of the localized conflict will need to be carried out in the context of each individual attack, as well as analysis by weapons experts to be conducted for evidence - specifically photos - to confirm perpetrators.

- Under-reporting from outside the Northwest region in the SAMS data. Location analysis on attacks that took place outside the region could assume fewer attacks took place rather than that SAMS did not have the capacity or resources to document in those regions. For example, figures from rural Damascus are low, which does not reflect a lower number of attacks but rather lower capability to document effectively.

- Towards the start of the conflict, local medical personnel were not yet accustomed to documenting incidents. Under-reporting from the related periods would mislead the timeline analysis, as it would assume fewer attacks took place, rather than those attacks were not documented.16

It is important to highlight that this report does not claim to label all 674 incidents as violating certain laws, or to be crimes against humanity or war crimes. That would require more in-depth analysis of each separate incidence. What this report aims to do, by utilizing the data SAMS has collected, is to show that there is reason to believe that violations against international law were in fact committed, and there is potential – and need – for investigators to explore further whether crimes against humanity or war crimes have taken place.

“I wish I could immediately remember and reference what happened during and after the attack I experienced. But my immediate question to you is ‘which attack?’ We have experienced so many... Our community has experienced so many. I know we are in an area that has experienced a lot of conflict, but the location of our hospital is known by all relevant parties. What I am sure of is that I will never forget all the details of each attack. Small details – like the memories of the confused looks on children’s faces – to the large details – such as women giving birth in the reception for weeks while we tried to fix the delivery room.”

Interview with Khalid, SAMS staff
ATTACKS ON HEALTHCARE SYSTEMS:

THE CONTEXT

Since UN Security Council 2139 demanded an end to impunity for violations of international humanitarian law, the world has unfortunately continued to witness attacks on healthcare systems worldwide. According to data recorded by the International Committee of the Red Cross (ICRC) from countries affected by conflict, attacks include ‘incidents against workers, the wounded and the sick and include murder, rape, physical abuse, looting and the destruction of medical facilities and medical transport vehicles’[^17]. Other research has also shown for instance that the direct and targeted attacks on doctors, witnessed in conflicts such as the Central African Republic, Myanmar, Lebanon and Congo, have become normalized elements of armed conflicts.[^18]

In terms of figures, between 2016 and 2020 the ICRC recorded 3,780 attacks and cases of obstruction in the provision of healthcare. These attacks spanned across 33 countries. Two-thirds of the attacks and incidents were recorded in the regions of the Middle East and Africa - where Syria was one of the countries with the most incidents, alongside Israel and the occupied territories, Afghanistan and the Democratic Republic of the Congo. More specifically, a 2018 study reviewing attacks on healthcare systems since 2008 showed 21 incidents being documented in the Bosnian conflict, more than 24 in Chechnya, 12 in Iraq, more than 100 in Kosovo, 93 in Yemen and 315 in Syria.[^19] Unfortunately, the developing situation in Ukraine in 2022 is likely to add significantly to the global numbers.

Despite this flagrant lack of respect to humanitarian principles and obligations under international law by various parties involved in conflict, it is also important to highlight that in terms of criminal accountability mechanisms, exploring attacks on healthcare facilities as a war crime or crime against humanity has increasingly developed as an accountability mechanism.

Some recent examples of those include[^20]:

- An ICC investigation on alleged crimes committed in the context of situation in Ukraine since 2013 will include attacks on medical facilities as war crimes. This investigation was conducted before the 2022 conflict, which will likely add further data to crimes committed by the Government of Russia.

- A Fact-Finding Mission looking at violations of international law in the Libyan case stated that “there are reasonable grounds to believe [2] attacks on medical facilities in Libya “amounted to IHL violations and war crimes”, calling for “further investigations … to establish the responsibility for these attacks and for other similar attacks”.

- An expert report on allegations that Armenian forces violated International Humanitarian Law during the 2020 conflict with Azerbaijan cited damage to medical facilities.
In the context of Syria, these examples highlight that those attacks on healthcare systems could be part of future criminal accountability with regards to crimes committed in Syria. The individual cases could also highlight best practices that those documenting incidents in Syria could learn from regarding criteria to ensure individual cases could be considered in such mechanisms. Academic studies have shown that whilst attacks on healthcare in conflicts are not a modern phenomenon, there appears to be a comparatively high number of attacks on hospitals in Syria when compared to other conflicts.21

Syrian medical personnel, rescue workers, NGOs and humanitarian activists have made various attempts to highlight this. In 2019 for instance, a group of 400 individuals and organizations signed an open letter calling on the key players of the conflict in northwest Syria to stop bombing in the Idlib region - in a demilitarized zone - highlighting the extent of attacks on healthcare systems. One example given was that in one day ‘three hospitals were destroyed in the span of just three hours. Kafranbel Surgical Hospital alone was bombed four times with only three to five minutes between each airstrike. Injured and sick, our patients had to run for their lives, some of them with their IVs still attached.’22

SAMS facilities have unfortunately also been at the forefront of many of these attacks. A total of 84 SAMS healthcare facilities have been impacted by attacks during the conflict, which equals a staggering 34% of SAMS’ total facilities. Many of these have been attacked repeatedly. In addition, 50 SAMS ambulances have been impacted. The effect on human life has also been staggering. Just from incidents that SAMS has collected, a total of 480 civilians have been killed from attacks on healthcare systems - 123 of those medical personnel. 200 persons of whom were killed in incidents related specifically to SAMS facilities. At minimum 18 of those killed were female. Outside of SAMS data, one study has shown that 930 health personnel have been killed in Syria as of June 2021.23

“\nIt took me a few minutes to compose myself after the air strike. The room I was in did not collapse, but I felt like the whole world around had. I thankfully immediately knew that I was fine physically at least. I had not been injured and no one else in the room I was in had either. I knew I had to get up and see what I could do, but did not know where to start.
What should I do first? Try and help the injured? Try and see what can be saved? Or start to take pictures of the impact? I just started to run around waiting for someone to tell me what to do.I was so lost.”

Interview with Sara, SAMS Medical Staff
RELEVANT IHL CONSIDERATIONS ON HEALTHCARE ATTACKS

The international legal framework - utilized by entities like the International, Impartial and Independent Mechanism (IIIM) or any potential courts that would prosecute potential crimes - will be used to explore whether the incidents collected in the database could be investigated as constituting violations of the law of war. The prominent set of rules that will need to be explored is International Humanitarian Law (IHL) - also known as the law of armed conflict. IHL is a set of international legislations that are applicable during conflict, different to international legislation that is applicable during peacetime. They state the responsibilities of states and non-state armed groups during an armed conflict and seek to limit the effects of armed conflict. Simply, they set out to clearly define what parties to a war are and are not allowed to do during a conflict.

Many of the principles with regards to IHL are found in sources which focus on international armed conflicts - most prominently the four primary Geneva Conventions. Even though many cases in the Syrian context are not international - relating to both state and non-state actors, much of the framework remains relevant. However, Syria is not a state party to all of the relevant law - such as Additional Protocol II to the Geneva Conventions. Therefore, those rules which have become customary international law apply most evidently in the Syrian context.

Firstly, it is important to emphasize that international humanitarian law has - from its outset - a profound ethos of protecting medical staff and facilities. Historically for instance, the first article of the 1864 Gen Convention stated that;

‘Ambulances and military hospitals shall be recognized as neutral, and as such, protected and respected by the belligerents as long as they accommodate wounded and sick. Neutrality shall end if the said ambulances or hospitals should be held by a military force.”
A heavy price to pay

This article focuses on protecting the neutrality of ambulances and hospitals. Following on from neutrality, the protection of these entities is also historically a significant part of IHL. The 1907 Hague Convention for instance states that;

‘In sieges and bombardments all necessary steps must be taken to spare, as far as possible, hospitals, and places where the sick and wounded are collected, provided they are not being used at the time for military purposes.’

We find the definition of healthcare systems as a protected entity is also a strong component of current IHL regulations, which this section will go on to discuss. It is also important to note that in 2016, the UN Security Council identified six grave violations committed against children in situations of armed conflict. One of these grave violations was attacks on hospitals. In the context of Syria, the Secretary-General has included the Government of Syria, their allies and ISIS on the list of perpetrators of violations related to children and armed conflict as a result of actions including “attacks on schools and/or hospitals.”

In terms of how IHL regulates this issue contemporarily, limitations on attacks, principles of distinction (between legitimate and prohibited targets), and the obligation of all parties to a conflict to take all feasible precautions to spare civilians and civilian objects and give warnings of attacks are the main relevant components.

There are several main principles to understand:

- Medical workers that work solely on medical duties - and medical facilities - are protected under IHL. They must be treated as neutral, therefore seen as civilians in an armed conflict, which means that direct attack against them is prohibited. Additionally, their work in providing medical care must be facilitated by all parties to the conflict. Conversely to this, if medical workers do become involved in the hostilities, or if medical facilities are used for military purposes, they lose their protection under IHL. They can then legally become a target in the hostilities. Simply, unless the hospital is being used for military purposes, targeted attacks (or even a threat of an attack) against medical facilities are violations of IHL. This is predominantly why, as will be highlighted below, the Government of Syria has tried to imply that hospitals have been used as military entities to justify attacks on them.

- The principle of proportionality in IHL requires that “parties to the conflict must refrain from attacks against military objectives that may be anticipated to cause civilian casualties, or damages that are disproportionate in relation to the intended military goal.” This includes a prohibition of causing excessive collateral damage or casualties - even when target is a military objective. It also requires the parties to the conflict to give warning -unless not possible - when an attack is carried out.

- IHL applies to all the signatory States of the Geneva Conventions of 1949 and their Additional Protocols of 1977, but it also binds non-state actors: private citizens, armed groups, national liberation movements, and international organizations. Therefore, in the context of Syria, all sides involved in the conflict must respect IHL, and can be held accountable if they do not.
The world has failed to make protecting the sick, the dying and injured a priority. Health care is at the forefront of current global attention, yet not enough is being done to protect health care workers and medical facilities. Sadly, with each attack, more people are prevented from seeking out the health care they desperately need. Weapon bearers must respect the universal value of and right to health care enshrined in international humanitarian law.”

ICRC President, Peter Maurer

In addition to IHL, the Rome Statute is a source of legislation that distinguishes what qualifies as a war crime and a crime against humanity. In general, while Syria is not an ICC member state and not bound by the Rome Statute, its criteria might inform future accountability mechanisms understanding of whether such a crime had been proven.

It is important to highlight that in the context of international criminal law, it is not clear what a potential accountability mechanism or court that would prosecute crimes conducted in Syria would look like. Whether, for example, crimes would be tried in the International Criminal Court (ICC), whether a special tribunal will be set up, or whether a hybrid court will be established at this moment is a point of uncertainty. It is important to highlight this ambiguity, as different courts may have different jurisdictions and criteria. For instance, the Rome Statute gives the ICC jurisdiction over slightly different war crimes depending on whether the context is an international armed conflict and of a non-international armed conflict. This means exactly what international crimes committed in Syria can be prosecuted, and how they are prosecuted, is yet to be clear.

In addition, technical rules that set out whether evidence can be admissible vary from different countries and different courts. In addition, whatever the future holds, an alleged perpetrator can only be tried for a crime that they could have realistically expected that they may have been violating and they could be prosecuted under national or international law for. In Syria this would mean crimes that come under conventions that Syria is a party to, Syrian law, or customary international law. In Syria this would mean crimes that come under conventions that Syria is a party to, Syrian law, or customary international law.
RESULTS: DATA OVERVIEW

The United Nations Security Council has demanded all parties to the Syrian conflict to “respect the principle of medical neutrality” which suggests knowledge that this has not been taking place in the context of Syria.39

This section will utilize the available data that SAMS has accumulated on attacks on healthcare in Syria in the context of this principle. This section will set out the specific data collected by SAMS interpreted in the context of the international framework. It will look at the attacks in the regions highlighted in red in Map.

It is important to start by highlighting that all parties to the conflict have allegedly played a role in attacks committed against healthcare facilities in the SAMS database, given that all are responsible to ensure they do not violate humanitarian principles. The alleged perpetrators include parties from all sides of the conflict, as well as States and non-state actors.

The table 1 highlights that the vast majority of attacks, both on SAMS facilities and on others, have allegedly been carried out by the Government of Syria and its allies - particularly the Government of Russia. 92% of incidents that were able to indicate a specific alleged perpetrator (581 out of 674) recorded the perpetrator as the Syrian or Russian government.

The table 2 shows the correlation between statistics on injuries, perpetrators and modality of attack. It highlights how many incidents took place using which weapon, correlating it with which alleged perpetrator conducted that attack.

Having established the dynamics of the alleged perpetrators of the attack in SAMS data, it is important to note that this reflects other statistics from other NGOs and documenters and is not only relevant to the locations of the facilities in this database.40

The following table shows the correlation between the alleged perpetrator and the modality of attack. It highlights how many incidents took place using which weapon, correlating it with which alleged perpetrator conducted that attack.

The understanding that attacks were carried out by the government of Syria and its allies is supported by the direct targeting of condemnation by the international community of these entities. For example, the United Nations General Assembly has stated that it: ‘Strongly condemned the widespread and systematic gross violations of human rights and the violations of international humanitarian law by the authorities and its affiliated (shabbiha) militias, including the use of heavy weapons, aerial bombardments, cluster munitions, ballistic missiles against civilians, and attacks on schools, hospitals and places of worship.’41

Whilst the Special Representative of the Secretary General for Children and Armed Conflict reported;

‘That the use of barrel bombs by government forces on civilian objects had resulted in huge numbers of children being killed or severely injured.’42

A total of 1,268 injuries were recorded in the SAMS data. 91% out of the total injured were by attacks allegedly perpetrated by the Syrian and Russian governments. In addition, it is important to note - as the table 2 highlights - that 93% out of the total injured were done so by Air strikes, Barrel Bombing and Missiles fired on healthcare facilities - weapons predominantly utilized by the Government of Syria and its allies.43 The Global Coalition were also responsible for 22 injuries.
ATTACKS ON HEALTH CARE SYSTEMS IN SYRIA 2015 – 2021

Map 1, The extent of the incidents of data collected by SAMS

# incidents per location
- 1 - 5, (119) locations
- 6 - 10, (21) locations
- 11 - 25, (13) locations
- 26 - 50, (2) locations

# incidents per sub-district
- 1 - 10, (37) sub-districts
- 11 - 25, (9) sub-districts
- 26 - 100, (8) sub-districts
- International borders
- Governorate borders

Map 1, The extent of the incidents of data collected by SAMS
## Table 1: Correlation between the alleged perpetrator and the modality of attack

<table>
<thead>
<tr>
<th>Modality of Attack</th>
<th>Gov of Syria</th>
<th>Gov of Russia</th>
<th>AOGs</th>
<th>Other/unknown</th>
<th>SDF</th>
<th>ISIS</th>
<th>Global Coalition</th>
<th>N/A</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Attack</td>
<td>349</td>
<td>57</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>407</td>
</tr>
<tr>
<td>Barrel bombing</td>
<td>84</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>84</td>
</tr>
<tr>
<td>Missiles</td>
<td>60</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>69</td>
</tr>
<tr>
<td>Assaulting</td>
<td>3</td>
<td>-</td>
<td>24</td>
<td>14</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>IED</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>20</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Cluster bombs</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>Shooting</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>White phosphorus</td>
<td>5</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Napalm shelling</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Grand total</td>
<td>517</td>
<td>64</td>
<td>31</td>
<td>15</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>39</td>
<td>674</td>
</tr>
</tbody>
</table>

## Table 2: Correlation between statistics on injured, perpetrators and modality of attack

<table>
<thead>
<tr>
<th>Modality of attack</th>
<th>Gov of Syria</th>
<th>Gov of Russia</th>
<th>SDF</th>
<th>Global Coalition</th>
<th>AOGs</th>
<th>ISIS</th>
<th>N/A</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air attack</td>
<td>489</td>
<td>155</td>
<td>-</td>
<td>22</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>666</td>
</tr>
<tr>
<td>Barrel bombing</td>
<td>282</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>282</td>
</tr>
<tr>
<td>Missiles</td>
<td>152</td>
<td>11</td>
<td>67</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>231</td>
</tr>
<tr>
<td>IED</td>
<td>33</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>20</td>
<td>53</td>
</tr>
<tr>
<td>Cluster bombs</td>
<td>1</td>
<td>19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>White phosphorus</td>
<td>13</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>Assaulting and crackdown</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Grand total</td>
<td>970</td>
<td>185</td>
<td>67</td>
<td>22</td>
<td>2</td>
<td>1</td>
<td>21</td>
<td>1,268</td>
</tr>
</tbody>
</table>
To conduct the cross-matching, we have then removed incidents registered in governorates outside SAMS areas of operations (Quneitra, Raqqa, Deir Ezzor and Hasaka), as well as the incidents that happened before 2015. The total number of incidents remaining were 321 records covering 8 governorates. These were matched against SAMS data – after ensuring conformation of records and manual reviewing, the matches compiled were as follows:

The table below shows the cross-matching with PHR incidents in Governorates where SAMS operates, and starting from 2015 onwards showed 140 full matched incidents and 22 partially matched incidents.

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Number of PHR incidents</th>
<th>Number of fully matching incidents</th>
<th>Number of partially matching incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idleb</td>
<td>102</td>
<td>55</td>
<td>10</td>
</tr>
<tr>
<td>Aleppo</td>
<td>105</td>
<td>50</td>
<td>9</td>
</tr>
<tr>
<td>Hama</td>
<td>33</td>
<td>22</td>
<td>2</td>
</tr>
<tr>
<td>Rural Damascus</td>
<td>42</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Homs</td>
<td>10</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Daraa</td>
<td>19</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Damascus</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Latakia</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>321</strong></td>
<td><strong>140</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

SAMS has also signed an agreement with Physicians for Human rights in order to cross-match and compare data. PHR adopts a different data-collection protocol for building their dataset. SAMS explored how the respective databases could complement each other. The initial cross-matching processes were kindly provided by Hala Systems, another partner organization to SAMS with whom we also collaborate on documenting attacks on health care.

A total of 565 records from PHR were received - including attacks on health facilities between 1/8/2011 to 17/2/2020 - covering twelve governorates.
Comparing data from the specified period shows there are 162 matched incidents between SAMS data and PHR’s data. 140 incidents fully matched, which means that both organizations were able to document an identical incident at the same date, geolocation, and facility level. While the rest of the incidents - 22 - represents a partial matching, meaning that the two organizations mentioned attacks that happened on the same date, geolocation, but we were unable to ensure reference to the same facility. Matching quality differs also from one governorate to another.

SAMS matched incidents with PHR in Rural Damascus (Ghouta), Daraa, Damascus, and Latakia were less than its documentation capacity in Aleppo, Idleb, and Hama. Comparisons with additional databases will be ongoing in an aim to increase the accuracy and number of documented attacks. The matching decreased after 2018 when SAMS began documenting attacks only on its own facilities.

In other words, both organizations were able to document additional incidents that were not included in their individual databases. The amount of additional data acquired from SAMS to the already published PHR database is estimated as an additional 512 incidents, a near 90% increase in the number of incidents.

SAMS will continue to work with Hala Systems and PHR to compare and cross-match with more databases in order to ensure complementarity and reliability among different human rights actors documenting attacks on healthcare systems in Syria.

Table 4: Total numbers of incidents documented by SAMS and PHR between 2011 and 2020, the number of unique incidents represents the sum of incidents documented by SAMS or PHR with subtracting duplicated cross-matches.

<table>
<thead>
<tr>
<th>Total unique incidents</th>
<th>Number of Crossmatched Incidents</th>
<th>Number of PHR Incident</th>
<th>Number of SAMS Incident</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2011</td>
</tr>
<tr>
<td>89</td>
<td>0</td>
<td>89</td>
<td>0</td>
<td>2012</td>
</tr>
<tr>
<td>48</td>
<td>0</td>
<td>48</td>
<td>0</td>
<td>2013</td>
</tr>
<tr>
<td>86</td>
<td>0</td>
<td>86</td>
<td>0</td>
<td>2014</td>
</tr>
<tr>
<td>190</td>
<td>43</td>
<td>123</td>
<td>110</td>
<td>2015</td>
</tr>
<tr>
<td>241</td>
<td>64</td>
<td>109</td>
<td>196</td>
<td>2016</td>
</tr>
<tr>
<td>117</td>
<td>22</td>
<td>32</td>
<td>107</td>
<td>2017</td>
</tr>
<tr>
<td>143</td>
<td>23</td>
<td>50</td>
<td>116</td>
<td>2018</td>
</tr>
<tr>
<td>112</td>
<td>8</td>
<td>23</td>
<td>97</td>
<td>2019</td>
</tr>
<tr>
<td>48</td>
<td>2</td>
<td>4</td>
<td>46</td>
<td>2020</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2021</td>
</tr>
<tr>
<td><strong>1077</strong></td>
<td><strong>162</strong></td>
<td><strong>565</strong></td>
<td><strong>674</strong></td>
<td>Grand Total</td>
</tr>
</tbody>
</table>
Figure 1 shows the documented incidents by SAMS alone, and PHR alone over the years, as well as the cross-matched incidents that were reported by both NGOs. PHR was significantly able to document more incidents in the early years of the conflict. While SAMS provided more documentation towards the end - keeping in mind the different documentation methodologies that has been applied -

Cumulation of Incidents recorded by SAMS and PHR databases

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Crossmatched Incidents</th>
<th>Number of PHR Incident</th>
<th>Number of SAMS Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>8</td>
<td>23</td>
<td>97</td>
</tr>
<tr>
<td>2018</td>
<td>23</td>
<td>50</td>
<td>116</td>
</tr>
<tr>
<td>2017</td>
<td>22</td>
<td>32</td>
<td>107</td>
</tr>
<tr>
<td>2016</td>
<td>64</td>
<td>109</td>
<td>196</td>
</tr>
<tr>
<td>2015</td>
<td>43</td>
<td>123</td>
<td>110</td>
</tr>
<tr>
<td>2014</td>
<td>86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Destruction of an ambulance in the street surrounding the Omar Bin Abdul-Aziz hospital and Nursing Institute - SAMS © 2016, Aleppo governorate, Aleppo city.
Following this, to understand alleged violations of international humanitarian law, the rest of the analysis of the data will follow the framework of understanding the five following concepts:

1. Whether an attack impacted a protected medical facility, such as a healthcare system.
2. Whether the alleged perpetrator knew that the attacked facility was protected.
3. Whether the attack targeted the facility, rather than something else in the area, particularly a lawful military objective, such as an enemy unit’s position near the facility.
4. Whether the facility was being used for acts hostile or harmful to the attacking force at the time.
5. Whether the facility was adequately warned by the attacking force before the attack.
1. Impacts of attacks

The Geneva Convention IV\textsuperscript{45} on the protection of civilians, alongside customary IHL, extends protection to non-combatant medical units where patients are cared for. This includes ambulances and hospitals. Violations of this protection—including attacks “causing great suffering or serious injury to body or health” of protected persons under IHL, or attacks that lead to “extensive destruction and appropriation of property” of entities that are protected, are considered a “grave breach” or a “war crime”.

What is clear from the SAMS data available, is that the substantial and destructive impact on protected facilities is very evident - and significant. The statistics and information are substantial, especially considering it is data from one entity. The total number of SAMS Facilities that were impacted by attacks is 81 health facilities, in addition to 11 mobile facilities.

The table below shows the number of facilities impacted by attacks.\textsuperscript{46} These include SAMS facilities, or those partially supported by SAMS.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
Provider & Health centers & Mobile facility & Grand total \\
\hline
SAMS & 75 & 10 & 85 \\
\hline
Partially supported by SAMS & 6 & 1 & 7 \\
\hline
Grand total & 81 & 11 & 92 \\
\hline
\end{tabular}
\caption{The number of SAMS facilities impacted by attacks}
\end{table}

The destruction of Al-Shifaa PHC after being targeted - SAMS © 2017, Rural Damascus governorate, Duma
Furthermore, the total number of facilities impacted across all the data is 251 health facilities, which compromise 222 health centers in addition to 29 mobile facilities. It is important to note, and will be highlighted later, that many facilities were attacked more than once.

The table below shows the number of facilities impacted by attacks. These include SAMS facilities, those partially supported by SAMS, and other NGO facilities to which SAMS has collected data.47

<table>
<thead>
<tr>
<th>Provider</th>
<th>Health center</th>
<th>Mobile facility</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMS</td>
<td>75</td>
<td>10</td>
<td>85</td>
</tr>
<tr>
<td>Partially supported by SAMS</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>NGO</td>
<td>141</td>
<td>18</td>
<td>159</td>
</tr>
<tr>
<td>Grand total</td>
<td>222</td>
<td>29</td>
<td>251</td>
</tr>
</tbody>
</table>

The total number of the incidents recorded is 674 incidents, 563 incidents on the health centers, 42 incidents on the mobile facilities, and 69 incidents on health workers.

The table below shows the total number of incidents that the database has collected and analyzed for this report.

<table>
<thead>
<tr>
<th>Provider</th>
<th>Health centers</th>
<th>Mobile facility</th>
<th>Health workers</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMS</td>
<td>296</td>
<td>19</td>
<td>39</td>
<td>354</td>
</tr>
<tr>
<td>Partially SAMS</td>
<td>20</td>
<td>1</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>NGO</td>
<td>247</td>
<td>22</td>
<td>29</td>
<td>298</td>
</tr>
<tr>
<td>Total</td>
<td>563</td>
<td>42</td>
<td>69</td>
<td>674</td>
</tr>
</tbody>
</table>
ATTACKS ON HEALTH CARE SYSTEMS IN SYRIA 2015 – 2021

Destruction of an ambulance in the street surrounding the Omar Bin Abdul-Aziz hospital and Nursing Institute - SAMS © 2016, Aleppo governorate, Aleppo city
In addition to hospitals and mobile facilities, vehicles – including ambulances – were regularly and repeatedly attacked as shown in Table 8. Overall, 181 vehicles were damaged - where 57 were damaged in incidents related specifically to SAMS facilities. 50 SAMS ambulances were attacked. These vehicles were documented as being utilized for providing medical care, and therefore attacks on them were attacks on civilians and protected entities.

The table below highlights the number and different type of vehicles that were attacked. They include vehicles owned by SAMS, partially supported by SAMS, and other NGO

<table>
<thead>
<tr>
<th>Type of vehicles</th>
<th>SAMS</th>
<th>Partially SAMS</th>
<th>NGO</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory system/</td>
<td>50</td>
<td>13</td>
<td>96</td>
<td>159</td>
</tr>
<tr>
<td>Service vehicle</td>
<td>7</td>
<td>3</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td>57</td>
<td>16</td>
<td>108</td>
<td>181</td>
</tr>
</tbody>
</table>

164 out of 181 vehicles (90%) were attacked in the regions of Idleb, Aleppo and Hama governorates (North-west Syria).

<table>
<thead>
<tr>
<th>Governorate</th>
<th>SAMS</th>
<th>Partially SAMS</th>
<th>NGO</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idleb</td>
<td>28</td>
<td>0</td>
<td>41</td>
<td>69</td>
</tr>
<tr>
<td>Aleppo</td>
<td>21</td>
<td>5</td>
<td>38</td>
<td>64</td>
</tr>
<tr>
<td>Hama</td>
<td>5</td>
<td>11</td>
<td>15</td>
<td>31</td>
</tr>
<tr>
<td>Rural Damascus</td>
<td>3</td>
<td>0</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Homs</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Damascus</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td>57</td>
<td>16</td>
<td>108</td>
<td>181</td>
</tr>
</tbody>
</table>
A heavy price to pay

The information collected by SAMS also shows the significant impact on life as well as facilities. As indicated above, the killing of protected persons in a way that violates international law may constitute murder as a war crime.

The total number of individuals killed as noted in the data was 480 persons, 200 persons of them killed in incidents related to facilities partially or fully supported by SAMS. Of those killed from the attacks, 123 were health workers, 56 of them were children, and at minimum 18 were females.

The total number of persons injured as a result of the attacks documented by SAMS were 1,268 persons, 752 of those injured in the incidents related to SAMS facilities. Furthermore, of those injured from the attacks, 318 were health workers, 137 of them were children, and at minimum 60 were females.

### Table 10: Total number of killed and injured from all of the incidents in the SAMS database.

<table>
<thead>
<tr>
<th>Killed/Injured</th>
<th>SAMS</th>
<th>Partially SAMS</th>
<th>NGO</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health care worker</td>
<td>Patient</td>
<td>Health care worker</td>
<td>Patient</td>
</tr>
<tr>
<td>Total killed</td>
<td>39</td>
<td>133</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Children killed</td>
<td>0</td>
<td>20</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total injured</td>
<td>130</td>
<td>539</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Children injured</td>
<td>0</td>
<td>83</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
The table below shows the correlation between total killed, modality of attack and alleged perpetrators, and highlights the numbers of those killed by attacks, using which weapons, whilst also correlating it with which alleged perpetrator conducted that attack.

What the above information highlights is that medical facilities in Syria – and civilians, were severely impacted by attacks on healthcare facilities in the country.
2. Knowledge of protected facilities

In terms of viewing the healthcare systems as protected facilities, as outlined above, intentionally directing attacks against medical units such as hospitals is prohibited under international law, as long as they are not military objectives. Being a military objective does not include providing care to sick or wounded fighters, or if medical staff and security in medical facilities carry basic weapons for their own protection. Hospitals or medical entities are not legally required to show any distinguishable emblem on their structures to confirm their protected status, which SAMS facilities and entities in general do not.

The healthcare systems from which the data has been collected were not used as military units, and were clearly utilized as entities that were providing health and medical care to civilians. For instance, alongside many of these facilities were supported by institutional donors, or by the Syria humanitarian pool fund, operated by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), which provides strong credibility for their case as non-military entities.

The question remains as to whether the alleged perpetrators had knowledge that the facility was protected. Firstly, in Syria many of the hospital’s territories have voluntarily shared their GPS coordinates with an UN-run system referred to as “humanitarian deconfliction.” Here the UN has been operating a mechanism for humanitarian deconfliction where hospitals can voluntarily register their GPS coordinates to be put on a “no-strike list” shared with Russia, Turkey, and the United States. This is to ensure that there is knowledge as to where they are situated so parties to the conflict avoid targeting them. Russia did not publicly acknowledge receipt of this information, and then in June 2020, went on to withdraw from the mechanism\textsuperscript{48} - undermining attempts to ensure parties to the conflict attempt to fulfill their international obligations.

In March 2018, SAMS – alongside other NGOS – began to share the coordinates of health facilities in Syria with UN OCHA.\textsuperscript{49} Progressively from March a total of 288 health facilities were registered.\textsuperscript{50} SAMS statistics on attacks that took place on deconflicted healthcare facilities is significant.

The SAMS database recorded 27 direct attacks on deconflicted facilities. These attacks affected a total of 22 facilities. 5 facilities that were on the deconflicted list were attacked directly more than once. In the scenario where the alleged perpetrators were states or their allies, the perpetrators could have obtained access to knowledge that these medical facilities were protected.
Examples of hospitals that were attacked after being put on the deconfliction list are the Al Zerbeh Hospital in Aleppo governorate which was directly attacked 2 times since it was deconflicted - and Idlib Central Hospital, which was also directly attacked 2 times since it was deconflicted. These two hospitals are both central and major facilities.

<table>
<thead>
<tr>
<th>Name of the deconflicted facility</th>
<th>Number of direct attacks</th>
<th>Name of the deconflicted facility</th>
<th>Number of direct attacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABZEMO PHC</td>
<td>2</td>
<td>Idlib national hospital (Avicenna)</td>
<td>1</td>
</tr>
<tr>
<td>AL FARDOUS HOSPITAL</td>
<td>1</td>
<td>Kafr Zeita Cave hospital</td>
<td>1</td>
</tr>
<tr>
<td>AL ZERBEH PHC</td>
<td>2</td>
<td>Kafr Zeita PHC</td>
<td>1</td>
</tr>
<tr>
<td>AL ATAREB HOSPITAL</td>
<td>1</td>
<td>Kafr Nabudah PHC</td>
<td>1</td>
</tr>
<tr>
<td>AL MA’ARA NATIONAL HOSPITAL</td>
<td>2</td>
<td>Kurin PHC</td>
<td>1</td>
</tr>
<tr>
<td>AL NAFS AL MOTMAENA MHPSS</td>
<td>1</td>
<td>Qah Maternity Hospital</td>
<td>1</td>
</tr>
<tr>
<td>AL SHIFA HOSPITAL</td>
<td>1</td>
<td>Qah PHC</td>
<td>1</td>
</tr>
<tr>
<td>AL ZAARAFARANAH HOSPITAL</td>
<td>2</td>
<td>Al Dana Hospital</td>
<td>1</td>
</tr>
<tr>
<td>Haritan PHC</td>
<td>1</td>
<td>Sarmin Health Facility</td>
<td>1</td>
</tr>
<tr>
<td>Hazano PHC</td>
<td>1</td>
<td>Taramla hospital</td>
<td>1</td>
</tr>
<tr>
<td>Idlib midwifery Health institute</td>
<td>1</td>
<td>Idlib Central Hospital</td>
<td>2</td>
</tr>
</tbody>
</table>

In addition, as the graph below shows, 6 of the health facilities that were attacked, were so both before and after they were put on the deconfliction list. This suggests that their clear protected status did not prevent the continuation of attacks on them.
A heavy price to pay

The number of Direct Incidents for the facilities that were targeted before and after Deconfliction

Looking further into the data, there were 18 other facilities where repeat indirect attacks took place. This for instance included Al-Zfaranah Hospital, where 2 attacks took place on it after it was put on the deconflicted list, attacks that were less than 20 meters from the facility, and caused moderate damage. This information severely undermines claims that the perpetrator could not have obtained knowledge that a given facility was protected and, looking at the repeated attacks on the same facilities, suggests the targeted nature of the attack. For these facilities the deconfliction mechanism did not provide additional or increased protection. In fact, other reports have additionally shown that being on the deconfliction list - being known as a protected entity - has not prevented attacks. This data from SAMS supports other existing information on how deconflicted facilities were not protected despite their status. For instance, a United Nations Headquarters Board of Inquiry is investigating certain incidents that had occurred in northwest Syria since 17 September 2017, in which facilities on the United Nations deconfliction list or supported by the United Nations were destroyed or damaged because of military operations, and a New York Times investigation that highlights how deconflicted facilities were targeted.

In addition, the United States, as part of its questions to Syria in the UPR process stated that:

‘NGOs report that ceasefire violations and attacks impacting healthcare facilities and personnel have created extreme disparities in healthcare access for Syrians, which has further exacerbated the impact of COVID-19. What steps have Syrian authorities taken to ensure it is not striking sites previously included in UN deconfliction lists? How is the regime cooperating with the UN-led deconfliction mechanism?’

The government of Syria, however, did not respond to this question.
3. Was the facility targeted?

Another of the central legal questions in any case regarding whether any given incident in the database would be seen as violating IHL or constitute a war crime or crime against humanity, is the intention of the preparator to target the facility. It would be necessary to fully understand the dynamics of fighting in the area before each attack to fully understand the intention. However, some patterns in the data suggest that alleged perpetrators potentially target the facility intentionally. As the following table suggests, witnesses to the incidents have stated that 354 incidents (the majority of incidents) were directed at the healthcare system, while 264 incidents were indirect. 80% of incidents with specific alleged perpetrators of direct incidents recorded the alleged perpetrator as the governments of Syria or Russia. This table shows which incidents were recorded as direct, if the attack took place directly on the facility, and which incidents were indirect, if the attack took place on the peripheries of the facility.

<table>
<thead>
<tr>
<th>Nature of attack</th>
<th>GOS</th>
<th>GOR</th>
<th>AOGs</th>
<th>Other</th>
<th>SDF</th>
<th>ISIS</th>
<th>Global Coalition</th>
<th>N/A</th>
<th>Grand total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>246</td>
<td>38</td>
<td>26</td>
<td>15</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>26</td>
<td>354</td>
</tr>
<tr>
<td>In-Direct</td>
<td>222</td>
<td>19</td>
<td>5</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>13</td>
<td>264</td>
</tr>
<tr>
<td>N/A</td>
<td>49</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>56</td>
</tr>
<tr>
<td>Grand total</td>
<td>517</td>
<td>64</td>
<td>31</td>
<td>15</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>39</td>
<td>674</td>
</tr>
</tbody>
</table>

674

Attacks on health facilities

354

Direct attacks on health facilities

246

Direct attacks by GOS
In addition, some facilities, despite being known as healthcare facilities, were attacked more than once. Although this does not indicate the intention of a targeted attack, it does raise questions of the knowledge of the alleged perpetrators of what they were attacking, and that lowers the likelihood that a facility was repeatedly caught up as collateral.

Table 14: List of facilities that have been attacked more than four times

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Sakhour Hospital</td>
<td>6</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Kafr Zita Specialized Hospital</td>
<td>8</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Omar bin Abdulaziz hospital</td>
<td>2</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Kafr Zeita Cave hospital</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Al-Ma'ara Hospital</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Al-Salam Hospital</td>
<td></td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Idlib Central Hospital</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Saraqeb Health Center</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>11</td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Al-Atareb Hospital</td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Al-Rastan Hospital</td>
<td>6</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Al Zerbeh Health Center</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>2</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Hama Ambulance System</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>1</td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Al- Huda hospital</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Orient Kafr Nubol hospital</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Al-Zaafaranah Hospital</td>
<td>3</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Osama AL Baroudi Health Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Al-Zarzour hospital</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Al-Rahma Cave hospital</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Al-Hakim hospital</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Al-Ansar Hospital</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Al-Kinanah Hospital</td>
<td>4</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Al-Ihsan Hospital</td>
<td>2</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Saraqeb Blood Bank</td>
<td></td>
<td>3</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Sarmin Health Facility</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Taramala hospital</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Jabal-Alzawia Mobile clinic</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Al-Abzemo Primary health center</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>
As this table highlights, some of the healthcare facilities were attacked a substantial number of times. For instance, Al-Sakhour hospital was attacked 19 times in the space of two years, which seems a significant amount, and undermines the implication that all the incidents took place as part of collateral damage. This is further highlighted with contextual specifics about the hospital. For example, Al-Sakhour hospital was a known Red Cross facility before the conflict, and then went underground for protection, which is why it remained relatively operational, but continued to be attacked.\textsuperscript{57}

This information is also supported by the international community’s condemnation that attacks on healthcare systems in Syria have been targeted and not just part of collateral. For example, The Special Rapporteur on the Right to Health has previously:

> “...condemned the targeting and destruction of medical units, stating that these incidents amounted to war crimes and may constitute crimes against humanity. He called upon all parties to respect the special protections granted to medical units by international humanitarian law. The Commission reported that targeting hospitals, medical personnel and transport and denying access to medical care remained an ingrained feature of the Syrian conflict. The Security Council, in its resolution 2139, demanded that all parties respect the principle of medical neutrality.”\textsuperscript{58}

Some reports outside of the SAMS data also show how the Government of Russia’s army showed or admitted intentionality to attack facilities, claiming facilities were used by combatants.\textsuperscript{59}

In addition, SAMS data shows four incidents where the same healthcare systems were attacked repeatedly for several days, suggesting that the alleged perpetrators were carrying out widespread and/or systematic attacks. Repeated strikes on medical facilities could be used as an indicator of intentional targeting. Again, although not evidence that the facility was targeted, it does suggest that the alleged preparer was more likely to have obtained knowledge that they were attacking a prohibited entity, but continued to do so. In all of these repeated incidents, witnesses documenting the attacks stated their understanding was that the attacks were ‘direct’

**Figure 3 shows a timeline that** indicates suggested patterns of the Governments of Syria and Russia regarding attacks on healthcare facilities as a war strategy. The timeline shows that attacks on healthcare facilities intensified in the period leading up to government troops capturing the different areas: in this case Aleppo, East Ghouta and Southern Idlib. More substantial location analysis would need to be conducted by investigators, but the increased attacks on healthcare systems often came before military gains. The timeline also suggests that there was no significant decrease in attacks after the main Security Resolutions were adopted. This reflects in a statement released by the Independent International Commission of Inquiry on the Syrian Arab Republic that said that attacks on health care facilities “markedly increased in frequency as of October 2015”\textsuperscript{60} as opposed to reduce in light of the Resolution.

It is also important to note that, as Table 2 shows, some of the weapons used by alleged perpetrators were indiscriminate weapons. \textsuperscript{232} of the incidents, for example, indicated the use of barrel bombs as the weapon utilized in the incident.
When these weapons were used, although it would be difficult to prove that the intention was to attack a healthcare system given the nature of the weapon as one that cannot be targeted, it does bring about other legal questions. Particularly, it is vital to note that indiscriminate shelling in and of itself is a violation of IHL because of the impact these types of weapons can have.\(^\text{61}\) Under international criminal law, such weapons may also be seen as a direct attack against civilians even if the protected entities were not themselves targeted.\(^\text{62}\)
Adoption of the UNSCR 2286 Recalling for further the specific obligations under international humanitarian law to respect and protect, in situations of armed conflict, medical personnel and humanitarian personnel exclusively engaged in medical duties, their means of transport and equipment, and hospitals and other medical facilities, which must not be attacked.
Barrel bombs, for instance, are used in a manner that violates the principle of distinction in IHL, which holds that parties to the conflict must at all times distinguish between civilians and combatants and attacks may only be directed against combatants.

These indiscriminate attacks documented in SAMS data emphasizes the findings of the 2021 Report of the Independent International Commission of Inquiry on the Syrian Arab Republic that...

"...the Commission has reasonable grounds to believe that pro-government forces have violated the international humanitarian law principle of distinction in launching indiscriminate attacks damaging civilian infrastructure, including hospitals and schools."
A heavy price to pay

Most of the reported incidents between 2015-2021 were in Idlib

70%

Of Incidents were in 2016

29%
4. Use of the facility

As explored below, the Government of Syria has reportedly stated that healthcare systems they have attacked are in fact used for military purposes. Even before the latest round under the UPR, in July 2019 they stated that:

“[All] health-care facilities in Idlib Governorate had been overrun by terrorist groups, that they no longer served their original purpose, that they could not be considered hospitals, health-care centers or even civilian objects under international humanitarian law and that they had been converted by armed terrorist groups into military posts, prisons, arms depots, workshops for manufacturing weapons and explosives, sharia courts and launch pads from which to fire shells and rockets at residential districts and safe areas.”64

In all there is no evidence to suggest that any of the healthcare facilities included in SAMS data were used for anything other than supporting medical care and treatment. In fact, SAMS possesses significant information on the medical caseload that the systems have undertaken.

For example, Table 16 tracks the well-recorded caseload for two hospitals (Al Salam Hospital, and Ma’ara National Hospital) a month before they were attacked by the Government of Syria. The detailed information upheld by SAMS on the nature of each of these consultations further indicates how the facility was being used. In addition, the plethora of photos and videos that have been compiled by SAMS highlight that the facilities were being used for medical purposes. Each incident would need to be analyzed specifically, but the videos and photos show medical rooms and equipment that were being used to provide and facilitate medical care.

The government of Syria has noted that they have given information to the United Nations of “medical facilities that have been decommissioned and are being used by terrorists, and that therefore no longer enjoy their former status.”65

No information to substantiate these claims has been made public, which would be an important step in their verification.

Table 16: Caseload of Al Salam and Ma’ara National Hospital

<table>
<thead>
<tr>
<th>Date of report</th>
<th>Program</th>
<th>Facility</th>
<th>Total consultations</th>
<th>18 &gt; Male</th>
<th>18 &gt; Female</th>
<th>18 &lt; Male</th>
<th>18 &lt; Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-Dec</td>
<td>UNICEF-PDO4</td>
<td>Al-Salam Hospital</td>
<td>7,959</td>
<td>2,132</td>
<td>2,414</td>
<td>112</td>
<td>3,301</td>
</tr>
<tr>
<td>18-Jan</td>
<td>UNICEF-PDO4</td>
<td>Ma’ara National hospital</td>
<td>4,648</td>
<td>959</td>
<td>499</td>
<td>2,087</td>
<td>1,103</td>
</tr>
<tr>
<td>18-Mar</td>
<td>UNICEF-PDO4</td>
<td>Ma’ara National hospital</td>
<td>7,168</td>
<td>1,443</td>
<td>812</td>
<td>3,105</td>
<td>1,808</td>
</tr>
</tbody>
</table>
A heavy price to pay

Inpatient at the deconflicted Idlib central hospital

ER at the deconflicted Idlib central hospital

ER at Al-Atareb deconflicted hospital

Inpatient at the deconflicted Idlib central hospital
5. Advanced warning

Hypothetically speaking, even when an entity has forfeited its protected status because it is being used for military purposes, and therefore becomes a legitimate military objective, there are still obligations on the perpetrators under IHL. The attacker must first send out a warning within a reasonable time before an attack for the entity to stop functioning as a military space and to warn them that an attack is about to take place. The only times where this is not required is if immediate military action is needed, such as if the facility is launching an imminent attack. SAMS data shows that in no incident was there an early warning given to the facility before an attack, even in the case of a direct attack on the facility. Additionally, any attack must comply with the principles of distinction, proportionality, and precautions in attack. Collateral damage, for instance, must be limited, and the attack must be proportional to the threat.

SAMS data on the infrastructural damage to health care systems during the attacks suggest that over 61% of attacks resulted in the healthcare systems being partially damaged, whilst over 6% of the incidents – a total of 31 resulted in the healthcare system being totally damaged or destroyed.

Often, even when facilities remained operational after an incident, they would no longer be able to function to their full extent. For example, Al-Salam hospital, located in Al-Mara district, provided a total of 7,959 consultations in the month of December 2017. On January 3, 2018, an air-to-surface missile attacked the hospital. the hospital only performed 465 consultations in January, highlighting how significant the reduction in capacity was.
“Medical units are being damaged and destroyed in large numbers throughout Syria, revealing what has become a repugnant hallmark of this horrific conflict (...). The sheer number of such facilities being hit, as well as information relating to some of the incidents, suggests that some hospitals and other medical facilities may have been directly targeted (...). These incidents amount to war crimes and may constitute crimes against humanity, as well as a violation of the right to health, and those responsible must be brought to justice.”

Dainius Pūras
The UN Special Rapporteur on the right to health,
A heavy price to pay
GOVERNMENT OF SYRIA’S UPR PROCESS

As the main State involved in the conflict and, along with its allies, the main alleged perpetrator of the attacks, it is important to note the responses given by the Government of Syria to claims it has breached IHL in attacks against healthcare facilities.

In 2021, as part of the process of the Universal Periodic Review (UPR)\textsuperscript{68}, several states made recommendations to Syria to stop attacks on healthcare systems. Two examples of these recommendations are as follows:

- Made by Germany: “Abide by international humanitarian law and immediately and completely cease all indiscriminate attacks, including those conducted by its allies, on residential areas, hospitals and all other civilian targets”
- Made by Turkey: “Stop targeting health facilities and civilian infrastructure”\textsuperscript{69}

In January 2022, the government of Syria, represented by the Deputy Minister of Foreign Affairs, responded to these various UPR recommendations regarding indiscriminate attacks on healthcare facilities carried out by the government. Among the various explanations and responses included:

- “In order to better protect civilians, the Syrian Arab Army works to secure medical facilities of all kinds. It guards hospitals and clinics and protects the roads leading to them so as to ensure that ambulances are able to get through,”

“The allegation that the army targets medical units in the areas under terrorist control is entirely untrue and is based on false sources of information, which have been used as a basis for compiling politicized international reports. Terrorists themselves have turned certain medical units and facilities into bases from which they launch their attacks. The units have also been used by the terrorists as prisons, weapons depots, workshops for manufacturing weapons and explosives, and platforms from which to launch rockets and missiles. Thus, they are no longer used as medical units but – by their nature, location, purpose and use – have come to make an effective and direct contribution to military action and, therefore, to put them out of action is to achieve a military advantage that is endorsed under article 52 (2) Protocol I Additional to the Geneva Conventions of 1949. It should be noted, moreover, that the government informed the United Nations of the medical facilities that have been decommissioned and are being used by terrorists, and that therefore no longer enjoy their former status.”\textsuperscript{70}
This response makes it clear that the Syrian government possesses a thorough understanding of the international obligations it must abide by. In its justification, the Syrian government implied that no international legal obligations were violated in the attacks on healthcare facilities, and that the facilities had forfeited their right to protection because they were in fact, military entities.

Based on statistics presented in this report on attacks by the Government of Syria on health facilities (specifically deconflicted facilities) the main alleged perpetrator in its engagement with the UPR continues to claim that all of the medical facilities it attacked were in fact being used as military entities in its engagement with the UPR. This role suggests both the invalidity of this claim and the undermining of the UNs deconfliction mechanism.

Russia’s military involvement in support of the Government of Syria brings several parallels to mind as we witness attacks on health in Ukraine. We now see the Russian government using similar justifications for alleged attacks against healthcare facilities committed in Ukraine. In the city of Mariupol for instance, a children’s hospital and maternity ward was reportedly bombed, resulting in 17 injuries. The official twitter account for the Russian Embassy in the UK claimed that the hospital was “used by Ukrainian armed forces and radicals, namely the neo-Nazi Azvov Battalion.”

“If you have never experienced an attack on a hospital, it is impossible to imagine. We are already working in a stressful situation, with not enough medicine or equipment to do our jobs. And then we get attacked. The fear that takes place during the attack, the fear and chaos in the immediate aftermath. The loss of life, the injuries, the damage, the destruction, the loss of a space that is supposed to be safe for the whole community. The inability to focus on why we are there, to make people better. It leaves a heavy weight on you that I do not think will ever go away.”

Interview with Munther, SAMS staff
A heavy price to pay.

Image: The wheelchair of a killed patient during the targeting of the ambulance department at Al-Shifa hospital. SAMS © 2017, Aleppo governorate, Afrin district.
CONCLUSION

Attacks on medical facilities have been a particularly prominent feature of the Syrian conflict. Experts have noted that attacks have been carried out “systematically and deliberately.” SAMS believes the plethora of condemnation by media outlets and victims regarding attacks on healthcare systems could be strengthened and supported by viewing what has happened in the legal context to encourage steps towards accountability.

Steps have been made towards accountability for attacks on health over the years. For instance, in response to demands from U.N. Security Council members, the Secretary General established an internal U.N. Board of Inquiry (BoI), which examined several incidents in northwest Syria that took place between September 2019 and April 2020. However, their analysis did not identify responsible parties, and was limited in scope in terms of the number of attacks that it investigated. Other attempts, such as the UN security council resolutions, seem not to have had the intended effect. In fact, as the timeline in Table 12 shows, after Resolution 2286 was passed, incidents did not decrease.

Despite the lack of impactful effort to counter impunity or offer effective remedies to communities that have experienced such attacks, over the past decade, international recognition and condemnation of the systematic nature of attacks and the resulting destruction of health care systems in Syria has increased. Worryingly, however we are now beginning to witness the same indifference to humanitarian principles and obligations in other contexts. Ukraine is now condemning Russia for attacking healthcare facilities in Ukraine as part of its aggression.

This data, collected by SAMS, alongside data collected by other initiatives, needs to be actively utilized to understand that perpetrators should be held accountable for violations of international humanitarian law before the world continues to witness growing escalation of such attacks by perpetrators, and to advocate for foreign policy change to this end.

Ultimately, the numerous attacks on healthcare systems shown in this data must be a prominent focus of the transitional justice discussions in Syria. The war crime of “intentionally directing attacks against... hospitals or places where the sick and wounded are collected, provided they are not military objectives” must be further investigated, explored, and brought forward in mechanisms of accountability.
A heavy price to pay

Destruction of an ambulance in the street surrounding the Omar Bin Abdul-Aziz hospital and Nursing Institute
2016, Aleppo governorate, Aleppo city

doctor in the midst of the rubble of Nawa Hospital - SAMS © 2015, Daraa governorate
## Terminology

### Healthcare Systems

“The healthcare system refers to the institutions, people and resources involved in delivering health care to individuals”

Source: World Health Organization

### Attack

“An attack on health care as any act of verbal or physical violence or obstruction or threat of violence that interferes with the availability, access and delivery of curative and/or preventive health services during emergencies. Types of attacks vary across contexts and can range from violence with heavy weapons to psychosocial threats and intimidation.”

Source: World Health Organization

The distinction between the term ‘attack’ and the terms ‘destruction’ or ‘seizure’ within Article 8 of the Rome Statute is clear. However, for the scope of this report the term ‘attack’ is used interchangeably.

### Accountability

“The means by which individuals and communities take ownership of their rights and ensure that states as primary duty-bearers, respect, protect and fulfill their international and national obligations”

Source: Office of High Commissioner of Human Rights

### International Humanitarian Law

“International humanitarian law is a part of international law, and is a set of rules which seek, for humanitarian reasons, to limit the effects of armed conflict. It protects persons who are not or are no longer participating in the hostilities and restricts the means and methods of warfare. International humanitarian law is also known as the law of war or the law of armed conflict.”

Source: International Committee of the Red Cross

### Medical personnel

“Persons assigned exclusively, whether for a permanent or temporary period, to medical purposes, namely the search for, collection, transportation, diagnosis or treatment of the wounded, sick and shipwrecked, or to the prevention of disease, or to the administration or operation of medical units or medical transports.”

Source: International Committee of the Red Cross

For the purposes of this report, medical personnel refer to civilian personnel, and not military personnel. At times, during the data analysis a distinction is made between medical personnel and civilians. This is to distinguish between those who are medical staff and those who are not. In the context of the legal analysis however, all are considered civilians under international law, as people who are not members of armed forces.

### Perpetrators

Although SAMS data contains significant information that indicates who the perpetrator of each incident is, there are different levels of detail available for each attack. As such, instead of assessing the evidentiary value of those identifications for each incident in this report, each incident will be considered to have an ‘alleged’ perpetrator, to be further investigated.

### UN Security Council 2139 Resolution

The United Nations Security Council Resolution 2139 was passed by a unanimous vote of the Council on February 2014. This resolution calls on all parties in the Syrian conflict to permit free access to humanitarian aid.
| **Security Council (2016) 2286 Resolution** | Security Council Resolution 2286 strongly Condemning Attacks against Medical Facilities, Personnel in Conflict Situations. Resolution 2286, supported by 80 states, included steps states could take to mitigate such attacks |
| **Universal Periodic Review (UPR)** | The Universal Periodic Review (UPR) is a unique mechanism of the Human Rights Council (HRC) aimed at improving the human rights situation on the ground of each of the 193 United Nations (UN) Member States. Under this mechanism, the human rights situation of all UN Member States is reviewed every 5 years. |
| **IIM** | The United Nations General Assembly adopted resolution 248/71, establishing the International, Impartial and Independent Mechanism to collect and analyze information and evidence of international crimes committed in Syria to assist criminal proceedings in national, regional or international courts or tribunals that have or may in the future have jurisdiction over these crimes. |
| **PHR** | Physicians for Human Rights has an initiative focus on Syria where they have documented attacks on health care facilities and the killing of medical personnel since 2011 as part of an effort to call attention to these crimes and secure evidence to hold perpetrators accountable. |
| **PHC** | Primary health care center |
| **GOS** | Government of Syria |
| **GOS** | Government of Russia |
| **AOGs** | Armed opposition groups |
| **SDF** | Syria democratic forces |
| **ISIS** | Islamic state in Iraq and Syria |
ENDNOTE

1 Several reports have presented this issue with differing perspectives. Examples include; IRC, A Decade of Destruction, 2021, access at https://storymaps.arcgis.com/stories/b0d1b045270941f6934f1c14059abb17 and Physicians for Human Rights, Medical Personnel are Targeted in Syria, 2021, access at https://phr.org/our-work/resources/medical-personnel-are-targeted-in-syria/

2 For more information on SAMS please visit https://www.SAMS-usa.net/


6 Rome Statue, Art. 8(2)(e)(iv)

7 Interview with Ahmed, witness of attack. All witness names in this report are pseudonyms to protect the security and confidentiality of all


13 For more information on SAMS please visit https://www.SAMS-usa.net/


20 SAMS, Lessons from international courts for documenters of attacks on medical facilities in Syria, (2022)


22 Urgent plea from medics and White Helmets struggling to save lives in northwest Syria (thesyriacampaign.org), 2019, access at https://diary.thesyriacampaign.org/sosidlib/


24 A mechanism set up to assist the investigations and prosecutions of persons responsible for the most serious crimes under international law committed in the Syria Arab Republic since March 2011

25 You can find the full texts and commentaries of these conventions in the ICRC website, access at https://www.icrc.org/en/war-and-law/treaties-customary-law/geneva-conventions

26 Customary international law is an aspect of international law involving the principle of custom. All States must abide by these laws as a matter of custom, whether or not they have signed up to. Along with general principles of law and treaties, custom is considered by the International Court of Justice, jurists, the United Nations, and its member states to be among the primary sources of international law. For more information on this see Henckaerts. JM & Doswald-Beck. L, Customary International Humanitarian Law, 2005, access at https://www.icrc.org/en/doc/assets/files/other/customary-international-humanitarian-law-i-icrc-eng.pdf

27 Convention for the Amelioration of the Condition of the Wounded in Armies in the Field. Geneva, 22 August 1864, access at https://ihl-databases.icrc.org/ihl/INTRO/120 this convention was later replaced

28 Convention (IV) respecting the Laws and Customs of War on Land and its Annex: Regulations concerning the Laws and Customs of War on Land, 18 1907, Regulation 27, access at https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/Article.xsp?action=openDocument&documentId=3C43C56CF8D4E3C12563CD005167AA

29 To better monitor, prevent, and end these attacks, the United Nations Security Council has identified and condemned six grave violations against children in times of war. See https://www.unicef.org/stories/children-under-attack-six-grave-violations-against-childen-times-war#:~:text=To%20monitor%2C%20prevent%2C%20or%20hospitals%3B%20rape%20other


32 Rule 55, Access to Humanitarian Relief for Civilians in Need, Volume II, Chapter 17, Section C, access at https://ihl-databases.icrc.org/customary-ihl/eng/docindex/v1_rul_rule55

33 ICRC International Humanitarian Law Database, Customary IHL, Rule 25, Medical Personnel, access at https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule25

34 Rule 14, Proportionality in Attack, Volume II, Chapter 4, access at https://ihl-databases.icrc.org/customary-ihl/eng/docindex/v1_rul_rule14

35 See Common Article 3 of the Geneva Conventions, the Second Additional Protocol of 1977, and Article 8 paragraph 2 of the Statue of the International Criminal Court

36 Such as the Special Tribunal of Lebanon, for more info see https://www.stl-tsl.org/en/about-the-stl#:~:text=Its%20primary%20mandate%20is%20to,Lebanon%20the%20Unit-ed%20Nations

37 Hybrid courts are defined as courts of mixed composition and jurisdiction, encompassing both national and international aspects, usually operating within the jurisdiction where the crimes occurred
The armed conflict in Syria is – in legal understanding - non-international armed conflict, so under the Rome Statute an ICC referral would only look at IHL violations criminalized in non-international armed conflicts.

See for example other reports such as the Huffington Post and Berggruen Institute, “Syrian Medical Facilities Were Attacked More Than 250 Times This Year”, 2016 and Reuters “Russia, Syrian army accused of destroying hospital, killing at least 2”, 2016 and Christian Science Monitor “Are Russian air strikes targeting hospitals in Syria?”, 2017


See for example the report of The Syrian Network for Human Rights, 2017, access at https://reliefweb.int/sites/reliefweb.int/files/resources/The_Syrian_Regime_Has_Dropped_Nearly_70%2C000_Barrel_Bombs_en.pdf

the main difference in data collection methodology is: PHR only document direct attacks whilst SAMS collect data on both direct and indirect-attacks, SAMS incidents also document attacks on mobile units, and include a wider definition for the modalities of attacks, SAMS also relies on a single internal source to confirm the attacks (SAMS field focal points). PHRs identification protocol requires more as their focal points are not first responders and rely on secondhand accounts

GC IV, Art. 17. All four Geneva Conventions of 199 and Additional Protocol I (AP I) of 1977 set out specific “grave breaches”, or criminal violations, in relation to such attacks.

2 of the health facilities changed under which NGO they functioned, but were attacked under both statuses, and therefore were recorded more than once.

12 of the health facilities changed under which NGO they functioned, but were attacked under both statuses, and therefore were recorded more than once.

See Reuters, Russia quits UN system aimed at protecting hospitals, aid in Syria, 2020, access at https://www.reuters.com/article/syria-security-russia-un-idUKK1N2E2122

See SAMS, SAMS and 11 humanitarian organizations share hospital coordinates, 2018, access at https://www.SAMS-usa.net/press_release/SAMS-11-humanitarian-organizations-share-hospital-coordinates/


See for example TCF, The UN Made a List of Hospitals in Syria. Now They’re Being Bombed, 2019, access at https://tcf.org/content/report/un-made-list-hospitals-syria-now-theyre-bombed/


OHCHR, Advance Questions to the Syrian Arab Republic (first batch), access at http://lib.ohchr.org/HRBodies/UPR/Documents/Session26/SY/Advance_questions_to_Syrian_Arab_Republic_third_batch.docx

A Direct incident was identified as any attack that took place less than 0 meters from the healthcare system – therefore the attack was on the hospital, clinic or vehicle

For more information on this hospital see SAMS, Saving Lives Underground, The Case for Underground Hospitals in Syria, access at https://www.SAMS-usa.net/reports/saving-lives-underground-case-underground-hospitals-syria/


The National News, Russia releases video confirming it targeted Aleppo hospital with missile, 2021, access at https://www.thenationalnews.com/mena/russia-releas-
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61 SAMS, The Use of Indiscriminate Weapons in Syria (2022)

62 For instance, the ICTY Appeals Chamber for Yugoslavia has concluded that the type of weapon used in an indiscriminate attack would support the claim that the alleged perpetrator did intend to direct the attack at the civilian population.

63 A/HRC/48/70, United Nations General Assembly, Forty Eighth Session, 2021


66 Rule 20, Volume II, Chapter 5, Section F, access at https://ihl-databases.icrc.org/casualty-ihl/docindex/v1_rul_rule20

67 Rule 14, Volume II, Chapter 4, access at https://bit.ly/3wJvLEr

68 The Universal Periodic Review (UPR) is a mechanism of the Human Rights Council where the human rights situation of all UN Member States is reviewed every 5 years. 2021/2022 saw Syria going through this review

69 A/HRC/WG.6/40/L.2, Draft report of the Working Group on the Universal Periodic Review, January 2022,


72 Official Russian Embassy Twitter Account, 2022, access at https://twitter.com/RussianEmbassy/status/1501913563073556498


74 Examples of these moral outcries include Documentaries such as For Sama, and The Cave, which show human perspectives of hospitals and health workers under attack in Syria.


76 Rome Statue, Art. 8(2)(e)(iv)
