

**Table 1: Content analysis code inclusion**

Main category	Subcategory	Code	Selected quotes
Utilization of SAS score tool by health care workers	Decision Making	Informant No. 16, Pediatrician, 49 years, Amana RRH	<i>“Decisions to put a child on CPAP are often correct, the problem is in the follow-up. For example, a patient set on CPAP should be monitored after every fifteen minutes for the first hour, and after that should be monitored after every four hours. It should be so until the day that CPAP is taken off where he or she has to be reassessed for SAS score.”</i>
		Informant No. 06, Registered medical doctor, Amana RRH	<i>“We rely on severity , we do use the SAS score, others will continue with oxygen therapy and other important medications and supportive management, there is nothing much you can do”</i>

		Informant no. 10, Registered medical doctor, 49 years, Amana RRH	<i>“Concerning CPAP, we basically assess the ability to breathe by using Silverman Score. If the baby scores 4 and above we put him/her on CPAP. For babies with low birth weight, born before time, and those below 1.5 kg we also put them on CPAP. Even if the SAS score doesn’t support, we initiate supportive CPAP for breathing”</i>
	Proper documentation	Informant no. 16, Pediatrician, 49 years, Amana RRH	<i>“Documentation is done by most of the doctors although not everyone writes everything”</i>
		Informant no. 10, Registered medical doctor, 49 years, Amana RRH	<i>“I can forget or get overwhelmed but we really insist to write them down but are mostly done”</i>
Healthcare worker’s experience in using SAS score tool	Perception of healthcare workers in using	Informant no. 12, Registered assistance medical officer,	<i>“It is very easy and you seem to make faster and more accurate decisions”</i>

	the SAS score tool	48 years Amana RRH	
		Informant no 09, Pediatrician, 51 years, Amana RRH	<i>“In general, it is difficult for beginners just use the tool because it confuses a little on scoring parameters such as upper chest and lower chest wall indrawing while on the other side, it is very easy for experienced doctors like me to use SAs score”</i>
		Informant no. 07, Nursing Officer, 29 years, Amana RRH	<i>“SAS SCORE is a tool that guides us on the management of a particular patient, non-adherence may lead to mismanagement that causes death or longer hospital stay”</i>
		Informant no. 15, Registered medical doctor, 30 years, Amana RRH	<i>“It is very helpful, in practice we do rely on the SAS score to make decisions, because we do not have other things like arterial blood gases and electrolytes that could help us to have a better diagnosis”</i>
		Informant no. 14, Registered medical doctor,	<i>“I recommend doing the SAS score quickly and early then setting the baby on CPAP, just</i>

		29 years, Amana RRH	<i>because early CPAP has served a lot of newborns”</i>
	The use of the SAS score tool in clinical settings	Informant no. 10, Registered medical doctor, 49 years Amana RRH	<i>“Ever since we started using the SAS score tool, I see there is an improvement in decision making to these babies put on CPAP in contrary to previously when babies were referred blindly to Muhimbili, nowadays the baby with 1.5kg is put on CPAP after some time they improve and gets discharged.”</i>
		Informant no. 11, Registered medical doctors, Amana RRH.	<i>“They use the SAS score tool as per guidelines, but I personally find it subjective. This is because you may find a neonate with the SAS score of 1 or 2 on CPAP and when weaned off one day after the SAS score rises to 3 or 4. So it is subjective”</i>
		Informant no. 12, Registered assistant medical	<i>“Their placement on CPAP also depends on whether the neonate has spontaneous breathing so we check the SAS score and put them</i>

		officer, 48 years, Amana RRH	<i>on CPAP, but those who were born before 32 weeks GA are put on CPAP regardless of the SAS score”</i>
		Informant no. 01, Nursing officer, 57 years, Amana RRH	<i>“In my opinion, I think SAS score is used correctly as we do not have any other way to determine whether a neonate requires only oxygen supplementation or CPAP”</i>
		Informant no. 08, Pediatrician, 36 years, Amana RRH	<i>“What I mean is, sometimes babies are many and the machines are inadequate, sometimes you have to decide who is in more need than the other. The one with higher SAS score grade is the one prioritized and gets initiated before the other”</i>
		Informant no. 4, Assistant nursing officer, 43 years, Amana RRH	<i>“We use experience by checking the signs and the doctor will score himself later when he comes. The first person to see admission is a nurse, so when I receive a baby with respiratory distress symptoms, I see that it is not necessary to wait for the doctor,</i>

			<i>because the more you wait for the doctor, the more the patient gets hurt and the situation worsens”</i>
Factors influencing adherence to the use of the SAS score tool for neonatal CPAP prioritization among healthcare providers.	Knowledge of using SAS score tool	Informant no. 07, Nursing officer, 29 years, Amana RRH	<i>” Everything is fine with specialist’s doctors”</i>
		Informant no. 3, Nursing officer, 33 years, Amana RRH	<i>“When new staffs arrive, they are educated and constantly reminded on the use of the SAS score”</i>
		Informant no. 11, Registered medical doctors, Amana RRH.	<i>“I know the SAS score tool which we use to assess neonates with distress and the score has four parameters. If the score is between one to three we do give oxygen supplementation and if the score is above that we initiate CPAP”</i>
		Informant no. 05, Assistant nursing officer, 26 years, Amana RRH	<i>” They are using the tool because the ward round includes the specialist doctor and the registrar, of which the registrars are asked</i>

			<i>by the specialist to score the babies with distress”</i>
		Informant no. 08, Pediatrician, 36 years, Amana RRH	<i>“That’s how we teach each other even to our young brothers and sisters”</i>
		Informant no. 07, Nursing officer, 29 years, Amana RRH	<i>“We have trained two years ago at Muhimbili, we were trained to operate CPAP, phototherapy machines. Were taught also on criteria for CPAP initiation and oxygen supplementation using the SAS score tool”</i>
		Informant no. 16, Pediatrician, 49 years, Amana RRH	<i>“Another reason is not knowing how to use the SAS tool”</i>
	Administrative factors	Informant no. 03, Nursing officer, 33 years, Amana RRH	<i>“Having a lot of patients than service providers mean the baby won’t be scored accordingly as required, it is like wastage of time”</i>
		Informant no. 14, Registered medical officer,	<i>“The challenge is that there is not enough equipment so sometimes causing a delay of some decision”</i>

		29 years, Amana RRH	
		Informant no. 16, Pediatrician, 49 years, Amana RRH	<i>“There is no motivation, you may find someone working in the hot premature unit, and the ward is busy hoping that maybe he will be motivated, but there is nothing he or she gets apart from salary”</i>
		Informant no. 13, Pediatrician, Pediatric HOD, 37 years, Amana RRH	<i>“There is a problem of unstable budget so performance payments can be given 3 to 4 times a year”</i>
		Informant no. 03, Nursing officer, 33 years, Amana RRH	<i>“If there is no supervisor, registrars might leave without writing SAS score grade in the patient file”</i>
	Individual factor	Informant no. 12, Assistant medical officer, 48 years, Amana RRH	<i>“SAS scores are posted on the wall, so when a baby appears, we study and score him and make decisions based on the SAS score we got”</i>
		Informant no. 12, Assistant medical	<i>“If you were on night shift and you attend a neonate with respiratory distress, you might be</i>



		officer, 48 years, Amana RRH	<i>asked in the morning meetings if you did the SAS score and what were the scores. So to avoid inconvenience you keep doing the SAS score to every neonate presenting with distress and this leads to building that habit”</i>
		Informant no. 06, Registered medical doctor, 27 years, Amana RRH	<i>“I may find it simple to use SAS score but another person may see it as a burden to assess all parameters so may just go direct to CPAP and continue with other duties so it’s a bit subjective from person to person”</i>
		Informant no. 03, Nursing officer, 33 years, Amana RRH	<i>“Someone might not be aware of the score but they are fearful to ask for assistance”</i>
		Informant no. 09, Pediatrician, 51 years, Amana RRH	<i>“Those who have been here for years now do know, but those who came recently from school do not”</i>