

# Questions Policy Makers Should Consider About Integrating NASG Into Health Systems

## Decision Tree 1: Establish whether there is need for the NASG

1. Where do women deliver in your system?
2. Where do they die?

We assume all women with severe shock from obstetric hemorrhage are trying to reach or reach a tertiary center. By looking at your country statistics on where women deliver and where they die, you can identify where the delays are.

If more women are dying at home, this could be due to delays in recognition of the problem, delays in deciding to seek care, and lack of access to transport. All these delays require additional efforts before the NASG can help overcome problems of maternal mortality (Pay attention to other aspects of the Continuum of Care for PPH and consider those aspects first).

**Delays in reaching a facility or delays in receipt of quality definitive care at facilities may be ameliorated by use of the NASG. See Decision Trees 2 and 3 for more analysis of these issues.**

# Decision Tree 2: Need for the NASG During Transport to a Tertiary Care Facility

Some questions and situations to consider:

## Home Deliveries

- 1. If transport from home is the source of delay, additional work may need to be done to facilitate transport systems, but the NASG has potential as a tool for local birth attendants or family members.**
  - Are birth attendants organized and trained?
  - Is there a link between local birth attendants and the facilities that they need to refer women with serious hemorrhage to?
  - Do birth attendants always refer to specific facilities?
  - Are those facilities all public, or do they include private facilities?

(ALL Referral facilities RECEIVING patients in the NASG need to be trained FIRST.)

- How long does transport to the tertiary level take? (best weather, worse weather)
- 2. Are there ambulance services available? If not, can another system of organized transport be developed, deployed, and sustained?**
    - If there is a transport system, can the NASG be placed on the transport system?

## Lower Level Facility Deliveries

- 1. If women get delayed from the primary care level, what are the transportation options? Are those services always available?**
- 2. Are there ambulance services available? If not, can another system of organized transport be developed, deployed, and sustained?**
- 3. If there is a transport system, can the NASG be placed on the transport system?**
- 4. How often do care providers at the primary care level attend obstetrical hemorrhage cases? How will they maintain their skills between cases? How much effort is needed for skill maintenance at low volume facilities?**

5. An important consideration if using the NASG at primary care level or community level is scale – how many people or centers would need to have an NASG? Is this really feasible?
6. Remember, the NASG must remain on a woman who is referred until she has received definitive care. If she comes from the community level or primary level:
  - How will they get an NASG to replace the one sent? It is recommended to always have at least two NASGs at each center for this reason.
7. Are emergency PPH kits available?
  - At what level are these used- community and or facility?
  - What is currently included in them?
  - If so, how would the NASG be integrated into the kits?
8. How and where are records of PPH and PPH related mortality kept and completed? (to help evaluate impact of NASG use)

## Decision Tree 3: Need for the NASG at the Tertiary Care Level

Placement of NASG at the Tertiary Level is the most cost effective, reduces logistical challenges of exchange and return, and is proven to decrease maternal mortality by over 50% in a variety of settings ranging from well-equipped to poorly-equipped. Some questions to consider:

1. Do the majority of the women who die from PPH/OH reach the tertiary level?
2. How many departments or places in the hospital receive or treat women in shock? How far are they from each other? Mapping locations where NASGs are needed will help to determine how many NASGs are necessary.
  - Overall volume of a facility needs to be considered to ensure there are enough NASGs available.
3. How long are delays in obtaining blood? NASG has been used to keep women stable up to 48 hours.

4. Are there women with religious cultural beliefs who refuse blood or blood product transfusions? NASGs are used in UK for Jehovah's Witnesses.
5. How busy are intake departments? Use of the NASG in transport can help staff quickly triage patients who need critical care, the NASG can serve as a signal of acuity.
6. Are all of the tertiary facilities public, or are there private facilities as well?
  - How will the private hospital staff be included in NASG training?
  - Will they have to purchase their own NASGs?
  - How do their referral networks function?
  - If receiving referrals from private facilities what kind of exchange and return system will be established?
7. What level staff are available at the tertiary center?
  - How long does it take to get care from a specialist?
  - The NASG can help overcome the feelings of powerlessness that nurses and midwives may have while waiting to send a patient to surgery because it gives them an intervention to stabilize patients while waiting for definitive care.
8. How and where are records of PPH and PPH related mortality kept and completed?  
Records are important to help evaluate impact of NASG use.