Project Title

KKH BMS MSF Baby Alert

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Organisation(s) Involved

KK Women's and Children's Hospital

Healthcare Family Group(s) Involved in this Project

Allied Health

Applicable Specialty or Discipline

Medical Social Work

Aim(s)

Leveraging on the capability of BMS, the team relooked on the feasibility for automating the manual process. The change is to:

1. Improve on patient safety.
2. Automate laborious and on-routine workflow and processes.
3. Reduce manual inputs of patients requiring Baby Alert.

4. Free up nursing hours from administrative work.
5. Ensure prompt follow up by MSW for smooth discharge of patient

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Conclusion

See poster appended/ below

Additional Information

Singapore Healthcare Management (SHM) Congress 2023 – Merit Prize (Operations category)

Project Category

Care & Process Redesign

Risk Management, Adverse Outcome Reduction

Keywords

Bed Management, Newborn infant, Safety

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KKH BMS MSF – Baby Alert

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KK Women's and Children's Hospital
SingHealth

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Background

In KK Women's & Children's Hospital, existing workflow is in place to protect and safeguard the interest of newborn infant. Child Protection Officer (CPO) residing within the Ministry of Social and Family Development (MSF) undertake the statutory role in assessing that it is safe for infant to be discharged to parents. Hence, the CPO works closely with Medical Social Worker (MSW) on pregnant women who are on MSF-Baby Alert list. The workflow involves the following steps:

- MSW input message in SAP system - "Not to discharge baby till clearance by MSW".
- Email sent to nurse and information will be kept in designated file.
- Nurses on night duty will check if any of the listed pregnant women is admitted and delivered.
- The message (Not to discharge…) will appear when nurse update the patient's movement in the SAP system.
- Nurses inform MSW to assess patient's coping abilities to care before baby is discharge home with mother.

With the implementation of Bed Management System (BMS) and Real-time Location System (RTLS), it has eliminated the need for nurses to update the patient's arrival movement in the SAP system manually. However, with the automation, there is a risk of mother on the MSF-Baby Alert list being discharged with baby without MSW assessment. Understanding the crux of the matter, a team comprising of Nursing, Admission, MSW and Info-communication Technology (IT) came together to brainstorm for possible solution.

Aims

Leveraging on the capability of BMS , the team relooked on the feasibility for automating the manual process. The change is to:

1. Improve on patient safety.
2. Automate laborious and on-routine workflow and processes.
3. Reduce manual inputs of patients requiring Baby Alert.
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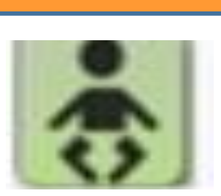
Methodology and Description of Interventions

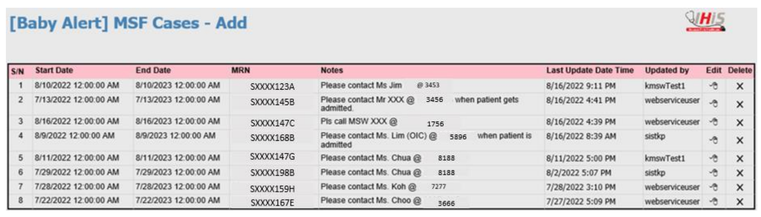
Phase 1 - Interim



With the assistance of the IT, Baby Alert attribute icon was created in the BMS. For the interim period, upon patient's admission to delivery suite, the triage nurse will update the movement in the SAP system. When the Baby Alert is flagged out, the triage nurse will update the room nurse. The nurse will update the doctor to raise the referral to MSW and will document in the nursing notes. On patient's transfer to the postnatal ward, the tagging of the Baby Alert will be done manually by the nurses in the BMS and the nurse will notify MSW via phone call.

Phase 2 – Full Implementation

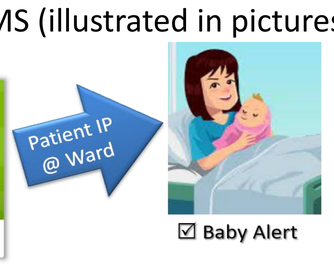
Enhancement of the BMS - Automation of laborious and on routine workflow through BMS (illustrated in pictures):



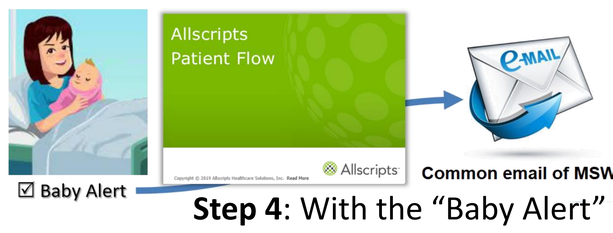
Step 1: patient with "Baby Alert" is identified by MSF, MSW will add the alert into BMS

Screengrab: BMS UAT Environment

Step 2: System will take over to do periodical census if patient is admitted



Step 3: When patient gets admitted, BMS will indicate "Baby Alert" on patient to enable the system monitoring



Step 4: With the "Baby Alert" marked and arrival to ward, BMS will trigger an email to inform MSW of the admitted patient, with the locality for MSW to follow up

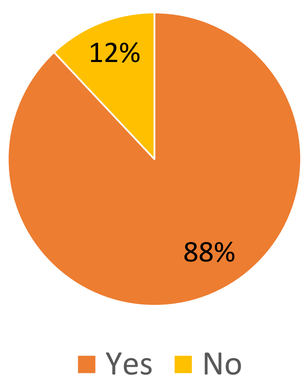
Results

With the successful inter-disciplinary collaboration, the team achieved the following:

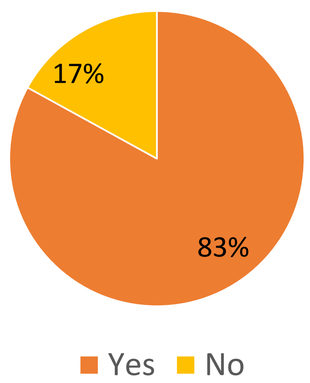
1. Harness technology to ensure safety of the newborn aligning with the CPO assessment that it is safe for infant to be discharged to the parents.
2. Automated laborious routine workflow and to streamline processes.
3. Reduced man hours particularly nursing and MSW.
4. Improved Nursing experience, as shown from the Nursing Survey on the right:

Achieved annual saving of over $52,000 in administrative cost from all stakeholders

As the Baby Alert is handled by the BMS, I am able to focus on Patient/Nursing care



With Baby Alert enhancement, it has reduced my workload



Conclusion

This successful inter-departmental project exemplifies the core values of KKH: **Compassion, Integrity** & **Collaboration.** By collaborating and understanding all stakeholders, we are able to leverage on existing technology to improve workflow for all stakeholders and improve patient safety in our service delivery, especially to protect and safeguard the interest of the at risk newborn infants.

PATIENTS. AT THE HE♥RT OF ALL WE DO. - We will continue to strive for process improvements for the betterment of patient's experience.

Legend:
BMS – Bed Management System MSF – Ministry of Social and Family Development
KKH – KK Women's and Children's Hospital UAT – User Acceptance Test