Standardizing Room Entry in Critical Care

The Problem

Background
In 2012, a new standard process for entering an ICU room was designed by a multidisciplinary group of staff in Medical ICU 7. In 2014, the process was spread to the Surgical ICU.

The refined, standardized room entry process:
- Streamlined the way of entering a patient room to facilitate performance of hand hygiene and donning personal protective equipment (PPE), when applicable, as close to patient contact while supporting the natural provider workflow
- Placed a cart inside each patient room containing all PPE
- Allowed clinicians to clean hands in view of patients and families while communicating in a standard way

Problem
The original PPE cart protocol designed to support this standard process was not ideal and required improvements in order to work as intended in all ICUs. As of November 2015, all remaining ICUs were still following the “pump in/pump out” process and had yet to adopt this new standard process.

Goal
- Redesign the precaution cart prototypes used in the MICU 7 and SICU pilots, utilizing clinician end-user feedback
- Disseminate the process to the remaining ICUs at BIDMC by the end of 2015

The Team
Click here for a full list of our team members

The Intervention
- MICU 7 and SICU frontline staff utilized their experience with the standard process to inform the final design of a PPE cart.
- Final consensus on the cart was obtained using multiple methods, such as staff surveys, in-unit feedback forms, 1:1 communication, scheduled workgroup meetings, champion input, and in-unit observations of the process.
- Upon final approval and feedback from staff as well as collaborating with the manufacturer, the newly designed cart was purchased for all units

Educational Rollout to Remaining ICUs:
- Pre roll-out education of staff by the Moore Nurse Consultants through posters, emails, and in-unit presentations
- Champions recruited from each unit
- Room entry FAQ posters placed in each unit
- The Moore Nurse Consultants and leadership from Health Care Quality in-serviced all critical care staff about the new room entry process
- New precaution signs were designed and distributed along with newly designed carts to every ICU room in the medical center.

Progress to Date
- Adoption of new room entry process in all critical care units at BIDMC as of December 2015
- Clarified misconceptions regarding room entry communication.

Lessons Learned
- Direct feedback from patients has a positive impact on early adoption of practice changes by physicians.
- Physical layout of some ICU rooms impedes proper precaution cart placement and therefore interrupts the normal room entry process.
- Changing “muscle memory” from previous room entry process of “pump in/pump out” is difficult and will take time.

Next Steps
- Ongoing support by Nurse Consultants and Critical Care Quality
- Continued monitoring of process through adults performed by local Nursing
- Quality Improvement will audit the communication part of the process
- Continue to monitor the incidence of nosocomial infections

For more information, contact:
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Funded by:
## Standardizing Room Entry in Critical Care

### Team Members

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### Critical Care Directors

- MICU 7 and Surgical ICU staff
- Principle Investigators: Daniel Talmor, MD, MPH and Kenneth Sands, MD, MPH
Please take a minute to give us your feedback on the new Room Entry Carts:

Is there anything you would change about this cart?

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

Does this cart help your workflow? If yes, how?

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

Do you have any other comments or suggestions?

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

Thank You!!!!
Standardizing Room Entry in Critical Care

Evolution of PPE Cart Design

Original PPE Cart

Current PPE Cart
STANDARIZED ROOM ENTRY

WHAT ARE WE DOING?

- Hand hygiene, gloves & gowns (precaution cart) will now be inside patient rooms.
- Instructions for the process will be posted on the precaution cart.
- The 1st time you enter the patient room during your shift, say:
  - Your name & role
  - Why you are in the room / what you are going to do.

WHY ARE WE DOING THIS?

- We enter ICU rooms 5x/hr./room → that's more than 2.5 million opportunities per year to spread infections at BIDMC.
- To make it easy to do the right thing:
  - Achieve 100% compliance with right PPE (personal protective equipment) & hand hygiene to protect ourselves & our patients.
  - Improve the patient & family experience in the ICU.
- To free up your time: saving just a few seconds at every room entry adds up to hundreds of hours a week.
Standardizing Room Entry in Critical Care
Staff Education

Poster of FAQs placed in each unit

FREQUENTLY ASKED QUESTIONS ABOUT STANDARDIZED ICU ROOM ENTRY

Why are we performing hand hygiene and donning PPE inside the room?

In 2012, a group of frontline staff in MICU 7 including RN’s, MD’s, RT’s, PT’s, and PCT’s were given the chance to redesign the room entry process to improve our practice and make it more efficient. They realized that their practice of touching curtains, doors, equipment, or supplies on the way in to a patient room contaminated their hands and decided these steps should be done inside the room. After several months, time studies revealed an average of 7 seconds saved with each room entry. That doesn’t sound like much, but considering there are roughly 10 room entries per patient per hour, these 7 seconds can really add up!

The new process also allows us to clean our hands in the view of the patient and family. We asked our Patient & Family Advisory Council (PFAC) members if they were comfortable asking providers if they washed their hands as the “Go Ahead and Ask” campaign encourages. They told us that they want to know our hands were cleaned but do NOT feel comfortable asking us.

Why can’t we remove the Calstat from outside the rooms to promote the process inside the room?

Our room entry process applies to entering the room only. Calstat must be available for exiting the room.

Why do we have to gown before we use Calstat? Won’t we contaminate the gown with our unclean hands, and then contaminate the patient when the gown touches the patient?

Hand hygiene should take place as close to contact with the patient as possible. If we do hand hygiene before gowning, we could contaminate our hands by touching any other surfaces, including the backs of our necks while tying the gown. Pathogens we pick up while obtaining and donning a gown will be eliminated right before touching the patient. Gowning prior to hand hygiene is the preferred order when putting on a gown independent of the new room entry process.

Although gowns should be as clean as possible, we wear a gown primarily to prevent the spread of pathogens from the patient to ourselves and our other patients.
Revised precaution signs were placed outside of each patient room and inside the room on the PPE cart.
It’s more than just hand hygiene!

Patients say...

Everyone’s hands should be clean.

[I’m] surprised BIDMC doesn’t already have a room entry standard process.

It’s like someone is entering my home...and we don’t know who you are.

Tell us who you are and why you are here.

It’s scary & makes me nervous when you don’t say anything.

Interrupt us – we want to know what is going on.

Click for video
Two former ICU patients share their experiences
(click image to play)