

# Inpatient COI

---

MEALTIME INSULIN & COORDINATION OF INPATIENT  
DIABETES CARE SURVEY

MARCH 2020

# Purpose & Methods

---

**The purpose of the Inpatient Management COI survey was :**

- 1) Understand current practices related to mealtime insulin and coordination of diabetes care around meals
- 2) Efficiently capture feedback (time spent to complete survey: <4 minutes)

## **Methods:**

- Survey conducted March 4-13, 2020
- 86 participants
- 621 subscribers to this COI

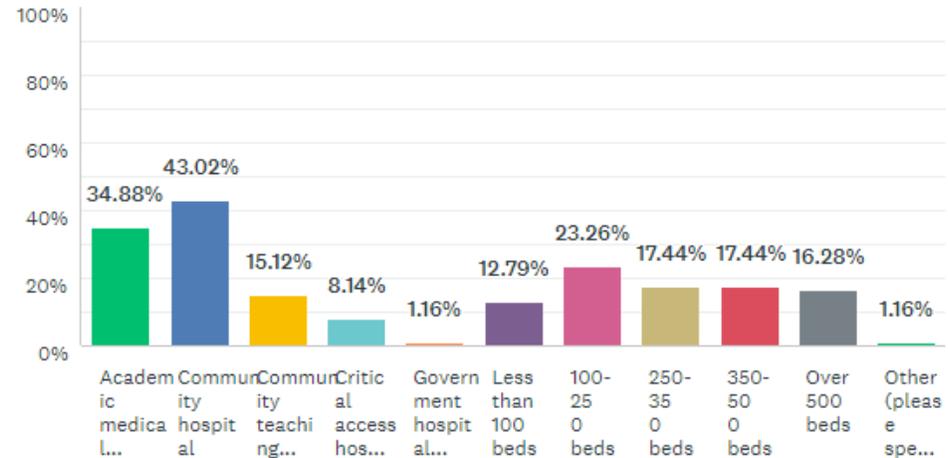
# Survey Results

## Question 1:

Which best describes your institution?  
(Choose all that apply.)

Which best describes your institution? (Select all that apply.)

Answered: 86 Skipped: 0



ANSWER CHOICES	RESPONSES
Academic medical center	34.88% 30
Community hospital	43.02% 37
Community teaching hospital	15.12% 13
Critical access hospital	8.14% 7
Government hospital (with or without academic medical center affiliation)	1.16% 1
Less than 100 beds	12.79% 11
100-250 beds	23.26% 20
250-350 beds	17.44% 15
350-500 beds	17.44% 15
Over 500 beds	16.28% 14
Other (please specify)	1.16% 1

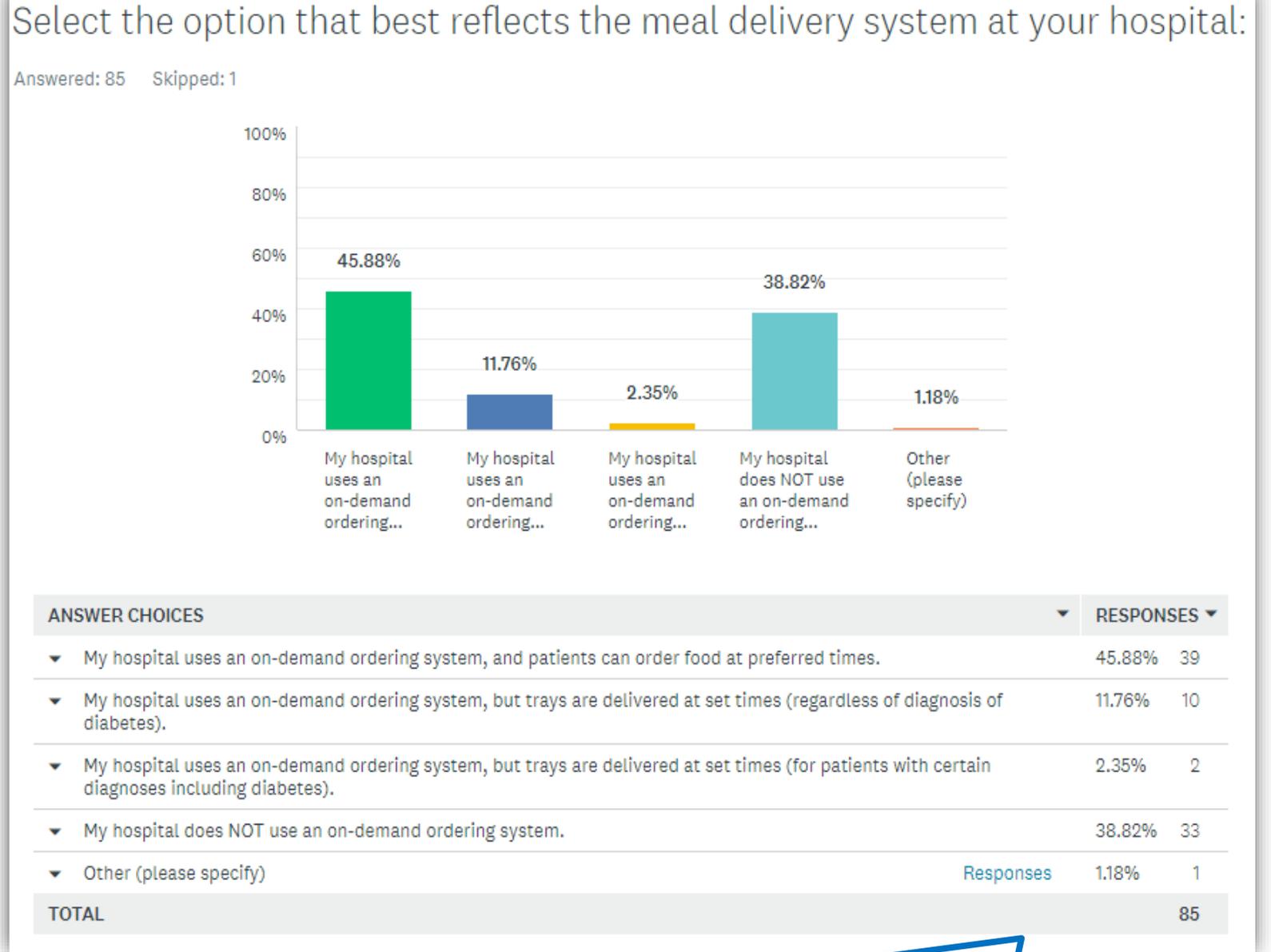
Total Respondents: 86

Comment: Urban non-profit hospital

# Survey Results

## Question 2:

Which best describes your institution?  
(Choose all that apply.)



**Comment:** Host from Nutrition Services announce to whole unit staff that tray will be arriving so nurses can do FSBG and insulin admin

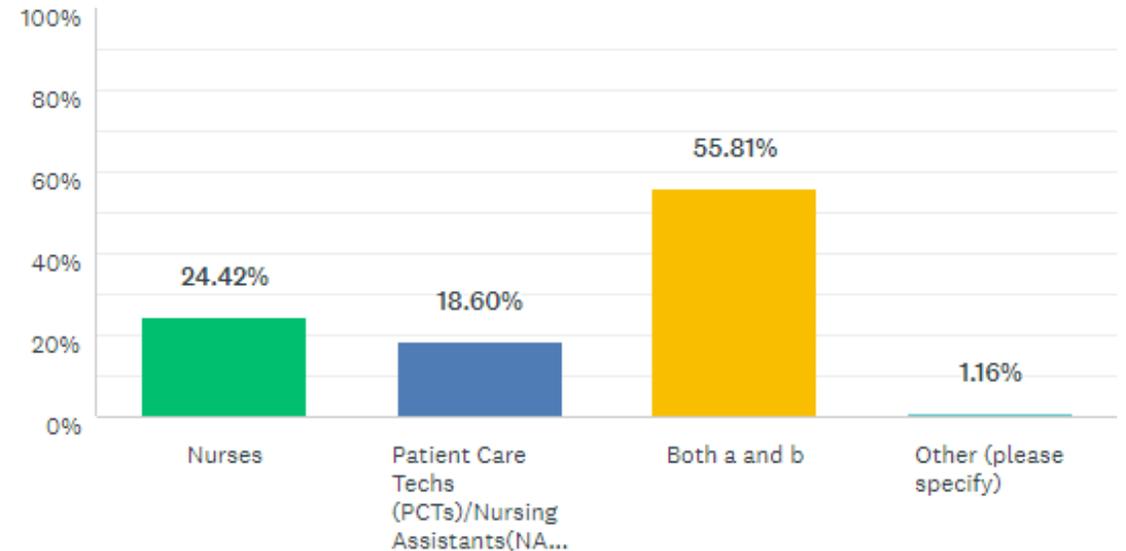
# Survey Results

## Question 3:

Select the option that best reflects the meal delivery system at your hospital.

The following staff check blood glucoses at mealtimes:

Answered: 86 Skipped: 0



**Comment:** a and b, however, only ICU, ED RNs do and med-surg floor RNs do not

# Survey Results

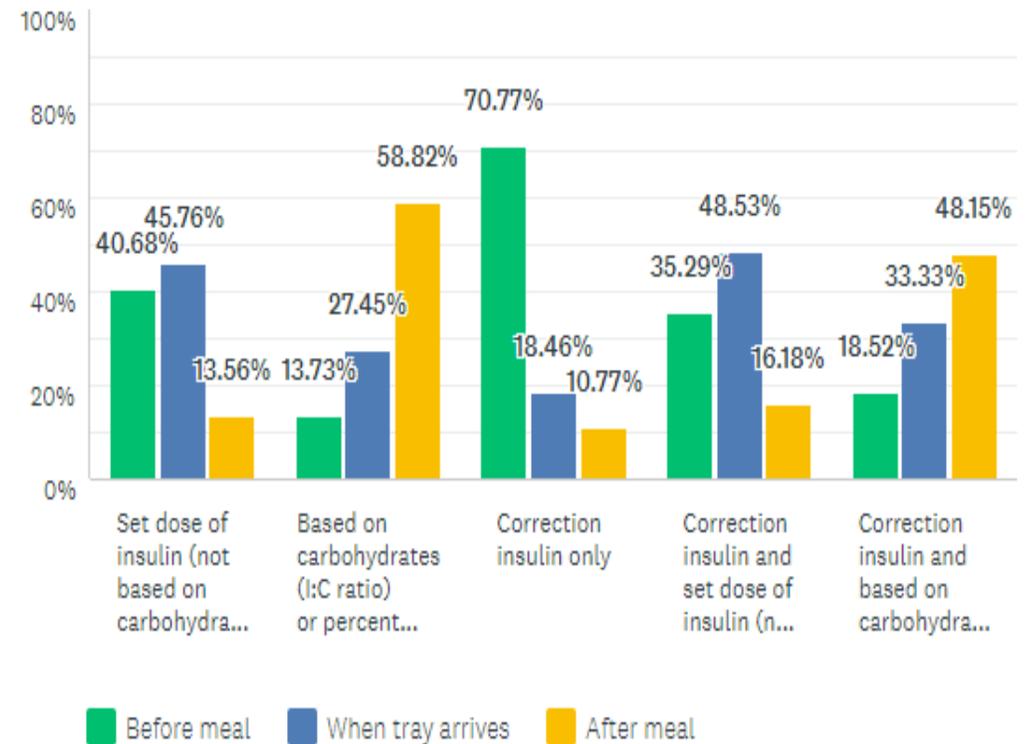
## Question 4:

Indicate when insulin is given based on type of insulin orders.

- Set dose of insulin (not based on carbohydrates or percentage of food eaten)
- Based on carbohydrates (I:C ratio) or percentage of food eaten
- Correction insulin only
- Correction insulin and set dose of insulin (not based on carbohydrates or percentage of food eaten)
- Correction insulin and based on carbohydrates (I:C ratio) or percentage of food eaten

Indicate when insulin is given based on the type of insulin orders.

Answered: 85 Skipped: 1



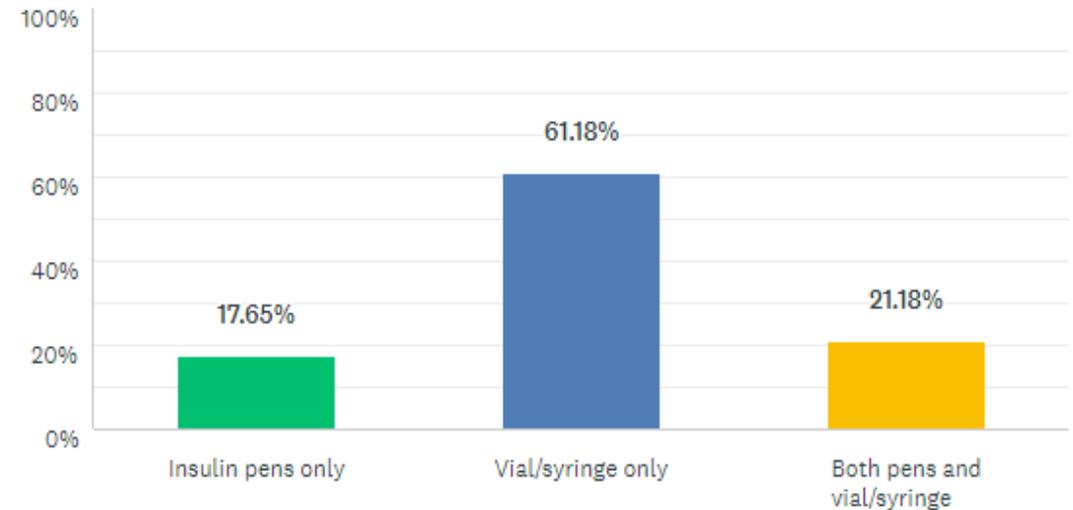
# Survey Results

## Question 5:

To administer subcutaneous insulin, my hospital uses...

To administer subcutaneous insulin, my hospital uses:

Answered: 85 Skipped: 1



### Comments:

- U-500 pens with safety needles recently introduced, but all other insulin has always been vial & syringe
- newly dx peds we get pens ordered for them
- pen only for U500 or teaching purposes, vial/syringe typically
- Insulin pump if patient is wearing while in the hospital

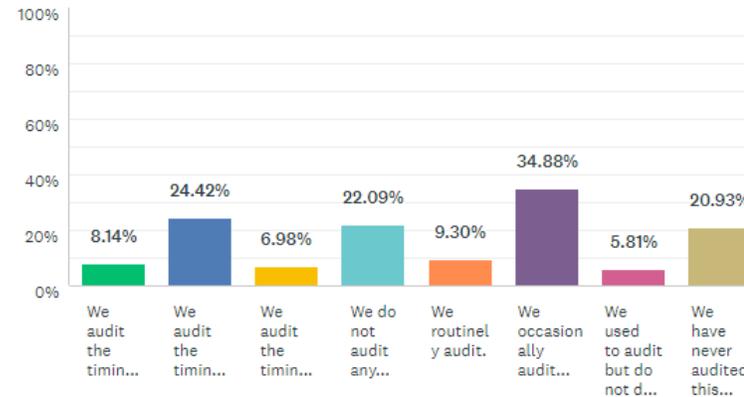
# Survey Results

## Question 6:

Indicate your hospital's auditing practices of coordinating diabetes care around meal times in terms of what you audit and how often.

Indicate your hospital's auditing practices of coordinating diabetes care around meal times in terms of what you audit and how often. (Check all that apply.)

Answered: 86 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ We audit the timing between blood glucose monitoring and meal delivery.	8.14% 7
▼ We audit the timing between blood glucose monitoring and insulin administration.	24.42% 21
▼ We audit the timing between meal delivery and insulin administration.	6.98% 6
▼ We do not audit any steps in the process.	22.09% 19
▼ We routinely audit.	9.30% 8
▼ We occasionally audit, either when doing improvement work or for "spot checks."	34.88% 30
▼ We used to audit but do not do so currently.	5.81% 5
▼ We have never audited this process.	20.93% 18

Total Respondents: 86

Comments (5)

### Comments:

- We are in the process of setting up a report that captures time tray ordered, time pre-meal BG is checked, time meal is delivered and time pre-meal insulin is dosed.
- We used to track meal delivery times, but that did not accurately reflect when patients were actually "eating"
- we are trying to create reports to audit timing between BG & insulin delivery
- depends on the floor or level of care
- Daily reports for any hypos <54 with root cause analysis

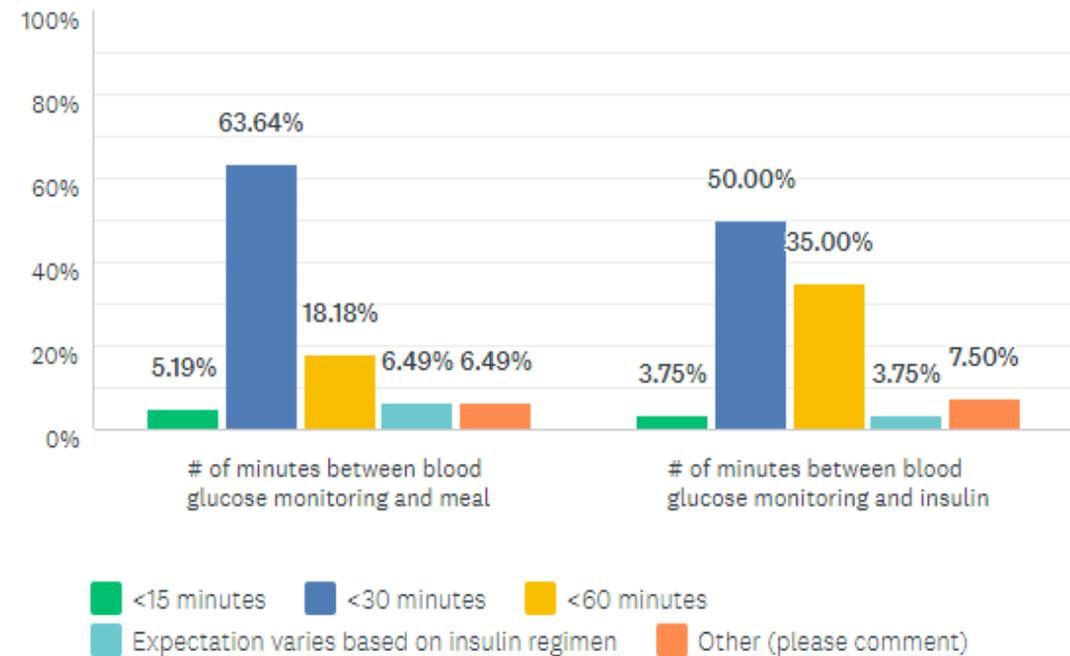
# Survey Results

## Question 7:

My hospital policy/expectations for timing are as follows:

My hospital policy/expectations for timing are as follows:

Answered: 83 Skipped: 3



Comments: *See next slide*

# Survey Results

## Question 7:

My hospital policy/expectations for timing are as follows:

### Comments:

- Insulin timed with meals to allow for before, with or within 1 hr BG-poc.
- At the time the tray is delivered/when tray arrives glucose is checked and insulin is administered
- Our hospital is on sliding scale insulin as it is too hard for insulin top carb ratio education for staff and population of patients per the powers that be. Its just so sad. No one in authority here listens to diabetes CDCES experts.
- Very poor job. Sliding scale dose based on random glucose values only
- We teach that if 60+ minutes have elapsed between BG check and meal delivery/insulin dosing, the BG must be rechecked
- 75 minutes
- Immediately after completion of meal
- <45 minutes
- But this is not happening
- 30-<45 minutes
- Our hospital expectation is at least ½ hour before a meal but there is a variation of practice on some units. At times the POC is being done 1-2 hours before the meal arrives and the RN administering the correction scale if needed.
- No determined time frame, 8a – 12n- 5p are times on EMAR
- 60 minutes is getting CHO coverage and correction at same time.
- There is no policy and meal time insulin is delivered whenever it is in the window for nursing to deliver it. Most mealtime insulin is sliding scale, unless requested by myself for a set dose plus sliding scale. Most of our patients are not on carb ratios and when they are, I practically have to “baby” the situation to make sure that insulin and meal delivery is within an appropriate time frame. And then I educate and educate and educate more about how the insulin should be delivered.
- 45 mins
- <30 min with set doses; <60 min with I:C rations

# Survey Results

## Question 8:

Sometimes there are unexpected delays with meal delivery. At our hospital, there is an expectation that blood glucose monitoring will be repeated if the tray was delivered more than \_\_\_\_\_ minutes after initial glucose monitoring.

Sometimes there are unexpected delays with meal delivery. At our hospital, there is an expectation that blood glucose monitoring will be repeated if the tray was delivered more than \_\_\_\_\_ minutes after initial glucose monitoring.

Answered: 86 Skipped: 0



ANSWER CHOICES	RESPONSES	
30 minutes	23.26%	20
60 minutes	30.23%	26
90 minutes	0.00%	0
We do not have an expectation to repeat the blood glucose; this is left to staff judgment.	38.37%	33
Other (please specify)	8.14%	7

### Comments:

- Insulin only administered after tray is in room
- PWD Trays are delivered to the nurses desk not the PWD rooms
- repeat is recommended but not in policy
- They would only recheck after 30 minutes if a correction dose was involved
- 45 minutes
- the person who delivers the tray voceras the person who is doing the blood glucose test ( the PCT0 and the nurse responsible for the patient when they are leaving the kitchen THE PCt then does the test and notifies the nurse of result so that she can administer the insulin
- We do not do accu check if tray is not present to avoid the meal delay issue

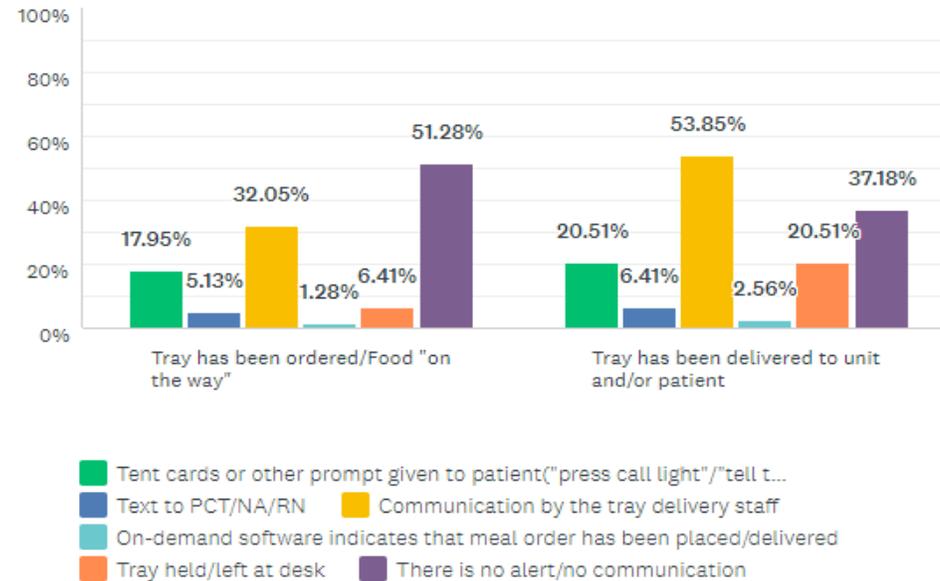
# Survey Results

## Question 9:

What strategies are employed to alert unit staff (PCT/NA/RN) about meals being ordered and meals being delivered to the unit/patient?

What strategies are employed to alert unit staff (PCT/NA/RN) about meals being ordered and meals being delivered to the unit/patient? (Check all that apply.)

Answered: 84 Skipped: 2



	TENT CARDS OR OTHER PROMPT GIVEN TO PATIENT("PRESS CALL LIGHT"/"TELL THE STAFF")	TEXT TO PCT/NA/RN	COMMUNICATION BY THE TRAY DELIVERY STAFF	ON-DEMAND SOFTWARE INDICATES THAT MEAL ORDER HAS BEEN PLACED/DELIVERED	TRAY HELD/LEFT AT DESK	THERE IS NO ALERT/NO COMMUNICATION	TOTAL RESPONDENTS
Tray has been ordered/Food "on the way"	17.95% 14	5.13% 4	32.05% 25	1.28% 1	6.41% 5	51.28% 40	78
Tray has been delivered to unit and/or patient	20.51% 16	6.41% 5	53.85% 42	2.56% 2	20.51% 16	37.18% 29	78

Comments (13)

Comments: See next slide

# Survey Results

## Question 9:

**What strategies are employed to alert unit staff (PCT/NA/RN) about meals being ordered and meals being delivered to the unit/patient?**

### Comments:

- Each floor is aware of their standard delivery times.
- It is mandatory that a nurse or unit coordinator signs for the tray- and the nurse is responsible for taking the tray in room and giving insulin injection
- Texts are sent to pilot unit staff only (at present). A variety of different strategies (tent cards, call light, leaving at desk, etc.) have all been implemented on different units, but no consistent (and enduring) practice.
- To secretary then to RN via vocera
- We had an on demand system with alerts built through the process, but this is not happening.
- Unit secretary announces overhead when trays are on the unit.
- Our CNAs only check BGs if tray has been ordered
- We have set meal times
- Tray held only for precaution patients
- We are in the process of implementing a text to the PCT or nurse when tray is ordered and another alert when the tray is delivered
- There is an inconsistency on each unit.
- A few units announce that trays are on the unit, prepare patients
- Dietary Hostesses call unit when they are leaving the kitchen with the trays, we do not have “on demand”

# Survey Results

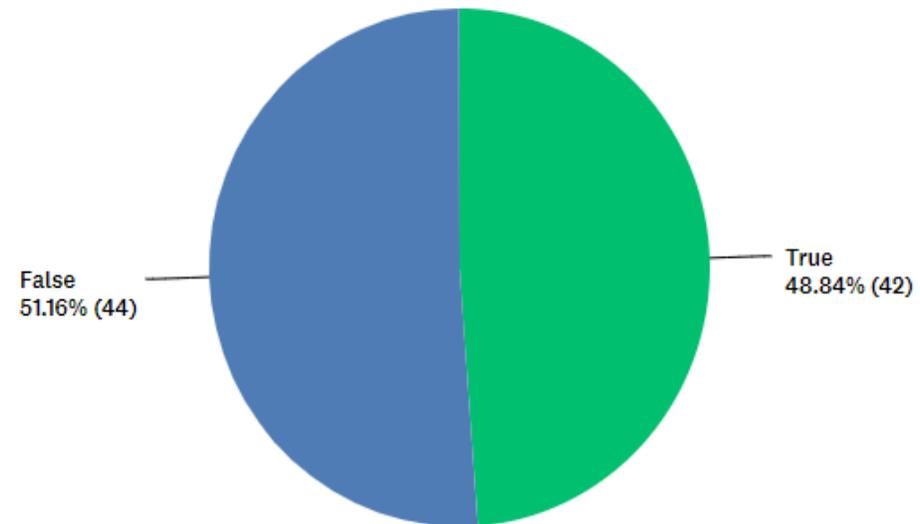
## Question 10:

True or False:

Tray delivery staff have a way of knowing which patients have point of care glucose monitoring orders and/or insulin orders

Tray delivery staff have a way of knowing which patients have point of care glucose monitoring orders and/or insulin orders.

Answered: 86 Skipped: 0



Comments: See next slide

# Survey Results

## Question 10:

### True or False:

Tray delivery staff have a way of knowing which patients have point of care glucose monitoring orders and/or insulin orders

#### Comments:

- Each floor is aware of their standard delivery times.
- Tray ticket marked
- Apple sign on whiteboard
- There is a sticker on the tray to alert the staff the tray is for a patient with diabetes and a signature is needed before leaving the tray
- All PDW trays on insulin regime go to the Ward/ RNDesk
- CBORD and Epic “talk” to one another, so Call Center staff can see the pre-meal insulin order (pre-meal lispro only; not pre-meal Regular, 70/30, pumps or U-500)
- There is a Yellow sticker placed on the tray by the person preparing the tray. It reads “Has your blood sugar been tested? If not, turn on your Nurse Call Light and DO NOT EAT.”
- Our dietary dept gets a report of who has insulin ordered, a note gets put on tray, for staff and patient to call nurse prior to eating
- pt or unit staff tell the tray delivery staff
- Tent card on the tray
- The tray ticket prints “Check clipboard” so that they check at the desk to ensure the BG has been checked prior to delivering
- “insulin” noted on ticket on tray
- Type of meal plan patient is on
- Based on patient with CCD ordered.
- Tray staff are only aware that carb consistent meal trays are delivered to the unit station.
- Card on tray lets the delivery staff know to call the nurse/tech to check BG and “insulin” is typed out on the meal ticket as well
- Door signage
- We recently developed a report that states if a pt receives insulin. This report is printed in diet office and the tray then gets special color tray mat
- Always ask before delivering tray to any patient
- The tray tickets are stamped “insulin”. Insulin trays are delivered in a separate cart from “non insulin” trays.
- They run a list of all patients on hypoglycemic meds and use this to notify nurse
- Magnet at door; tent card on tray; meal ticket
- Meal ticket is stamped in food/nutrition with the word insulin
- Carb restricted meals have a blue place mat on tray.
- Indicated on tray
- Stop card on tray that is initiated by electronic order set
- They have a carb count ticket – trays are left at desk for nurses to do accu check before meals. Trays are routinely audited for on time delivery
- We did some custom build in our on-demand system so that there’s an marker for those patients with POC glucose orders. This really has helped to trigger extra communications by tray delivery staff.