



MALNUTRITION QUALITY  
IMPROVEMENT INITIATIVE

# Welcome to Today's Expert Webinar for the 2018 MQii Learning Collaborative: "Snapshots from Three 2018 MQii Learning Collaborative Members"

**December 14, 2018**

We will get started promptly at  
12:00 PM ET  
(11:00 AM CT; 10:00 AM MT; 9:00 AM PT)

*All phone lines have been muted*

# Before We Get Started...

The screenshot displays the Cisco WebEx Meeting Center interface. At the top, the title bar reads "Cisco WebEx Meeting Center" and includes a menu with "File", "Edit", "Share", "View", "Audio", "Participant", and "Meeting Help". Below the menu, there are tabs for "Quick Start", "Meeting Info", and a meeting ID "20170322 - M...". A "New Whiteboard" button is also visible. On the right side of the top bar, there are icons for "Participants", "Chat", "Recorder", and "Notes". The "Chat" icon is highlighted with a red box, and a red arrow points from it to the "Participants" list on the right. The "Participants" list shows "Laura Fincher (Host, me)" and "Eleanor Fitall". Below the top bar, a large slide is displayed with the MQii logo and the text: "Welcome to Today's Expert Webinar for the 2018 MQii Learning Collaborative: 'Highlights from 2018 MQii Learning Collaborative Members'". The slide also includes the start time "12:00 PM ET" and a note that "All phone lines have been muted". At the bottom of the slide, there is a small text block: "The Malnutrition Quality Improvement Initiative (MQii) is a project of the Academy of Nutrition and Dietetics, Avalere Health, and other stakeholders who provided guidance and expertise through a collaborative partnership. Support provided by Abbott." The bottom of the interface shows a "Recorder" section with a "Select button to record on server" and a "Connected" status indicator.

# Today's Agenda

Agenda Item	Presenter
Welcome and introduction to the “Highlights from 2018 MQii Learning Collaborative Members” webinar	Kelsey Jones
Strategies in Data Collection/Analysis for a Multi-Facility Organization	Barbara Sherwood, MS, RDN, CD
Prevalence Monitoring, Nutrition Screening, and Outcomes	Louise Merriman, MS, RD, CDN and Kristen Mathieson, MBA, RD, CDN
Nutrition Risk Screening in Identification of Patients with Malnutrition	Lori Hartz, MS, RDN, CD and Cheryl Shockey MS, RDN, CD
Questions – 10 mins	



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# Strategies in Data Collection/Analysis for a Multi- Facility Organization

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Barbara Sherwood, MS, RDN, CD  
***Clinical Nutrition Manager,  
Intermountain Healthcare***

- Build your team
  - Identify IT and leaders to support you and the project
  - Engage staff members, share the mission and excitement
- Continually Evaluate the Data
  - Do the numbers make sense?
- Use the data to find your CI pathway
  - Use your team to decide the direction

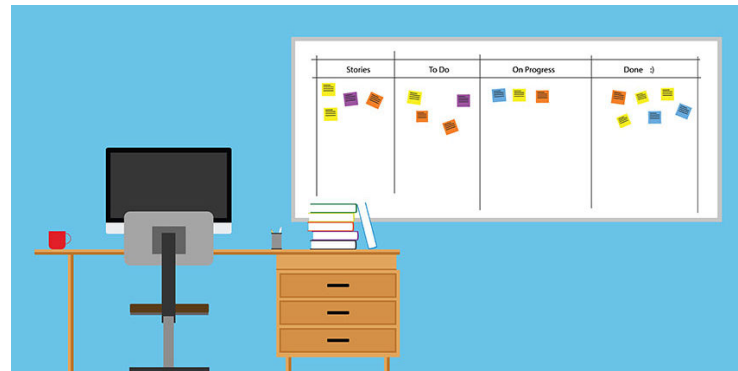
# Building a Team

- Always network within your organization
  - Knowing key players outside your designation is important.
  - Ask questions – How are other people getting projects completed?
- Find out what your leaders are being held accountable to accomplish
  - Your goals must align with the organization
  - You will have more support if others share the same needs
- Find a research champion to get through the IRB process
- You will need your staff to accomplish your goals
- Set a timeline and goals for the project – even if it's invented



# Engage Your Staff

- Keep staff informed of the process.
- Create a “Huddle Board” for tracking progress of projects and goals
- Many Staff members want to perform
  - Identify your helpers – leadership development



# Data Building

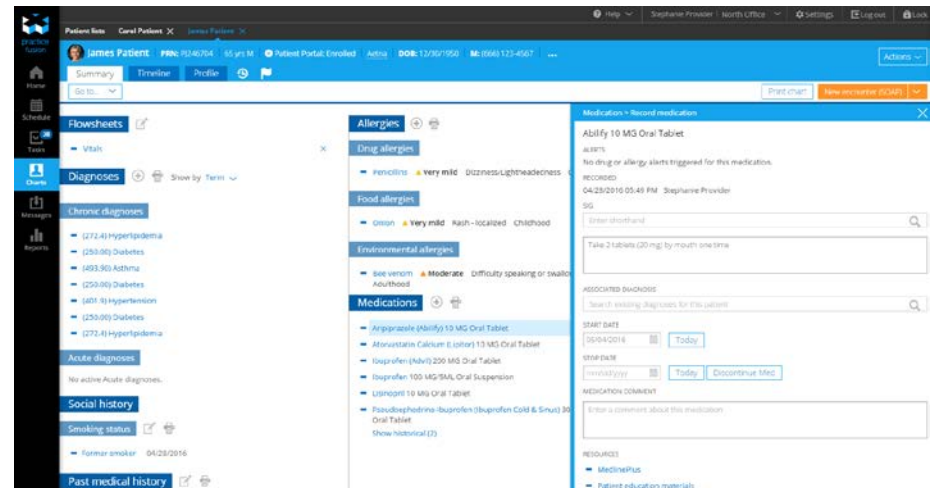
## Once you identify your IT partner set up bi-weekly meetings to discuss the project

- Walk the IT person through the front end (data input) of the program – the back end of any program is a very different language
- Different programs have different barriers (Cerner, EPIC)

```
int mulX = 1, mulY = 1;

switch (type) {
  case Left:
    if (b.getSpeed().x() < 0) mulX = -1;
    break;
  case Bottom:
    if (b.getSpeed().y() > 0) mulY = -1;
    break;
  default: break;
}

if (mulX == -1 && mulY == -1) {
  b.getSpeed().x() < 0 && b.getSpeed().y() > 0
  Condition is always false when reached more... (F1)
}
```



The screenshot displays a medical software interface for a patient named James Patient. The interface is divided into several sections:

- Header:** Patient name, ID, gender, and other identifiers.
- Navigation:** Home, Schedule, Tools, Data, Messages, Reports.
- Flowcharts:** A section for flowcharts, currently showing a 'Vitals' flowchart.
- Diagnoses:** A list of diagnoses, including Chronic diagnoses (Hypertension, Diabetes, Asthma) and Acute diagnoses (None active).
- Social history:** A section for social history, currently showing 'Smoking status' as 'Former smoker'.
- Allergies:** A section for allergies, including Drug allergies (Penicillin), Food allergies (Orion), and Environmental allergies (Venom).
- Medications:** A list of medications, including Arripresole, Atorvastatin, Ibuprofen, Lisinopril, and Pseudoephedrine.
- Medication Detail:** A detailed view of a medication, 'Abilify 10 MG Oral Tablet', showing its start date, stop date, and associated diagnoses.



## Data Building (Continued)

- Meet with your staff to walk through the data
  - You don't know what you don't know
- Meet with your counterparts and colleagues
  - Every facility does things different – even if you think they are...



# Evaluating Data

You will feel great till you see the first set of numbers come back!

- Meet with your teams - again
  - Discuss how the information is entered by caregivers
  - Discuss how IT built the data pull on the back end
  - Discuss how to pull it the way you need to see the info

What are your Ns? What does the literature support?

Nutrition Care Plan for Patients (Age 65+ Years) Identified as Malnourished after a Completed Nutrition Assessment	Measure Population (All Patients 65+)	Measure Population-# Sev/Mod Malnourished	Denominator Exclusions			Denominator	Numerator Elements		Numerator	Performance Score
			Length of Stay <24 hrs	Discharge to Hospice	Left AMA		# w/ Care Plan			
	368	26	0	0	0	26	21		21	80.77%

# Evaluating Data (Continued)

- It may take several submissions to get the information the way you need it
- Be prepared to explain the data to your leadership, staff, and colleagues

Performance Period - June 2018														
Completion of a Malnutrition Screening within 24 hours of Admission (Patients Age 18+ Years)														
Facility	June		July		August		September		October		November		December	
	Performance Score 24 hours	120 Hours	Performance Score 24 hours	120 Hours	Performance Score 24 hours	120 Hours	Performance Score 24 hours	120 Hours	Performance Score 24 hours	120 Hours	Performance Score 24 hours	120 Hours	Performance Score 24 hours	120 Hours
Dixie	74%	99%	67%	N/A										
LDS	82%	98%	90%	N/A										
McKay Dee	89%	97%	94%	N/A										
Utah Valley	97%	100%	98%	N/A										
IMC	74%	96%	73%	N/A										

## Regular meetings will “HELP” keep you on track

- Be prepared for delays
  - Live events
  - Data discrepancies
  - Other projects take precedence
- Let senior leadership know what you are doing – they will help
- You are never done so make sure to keep good relationships in the face of frustration

## Where do you go with the information?

- Share with your teams and have them part of the decision of for your CI project
- Keep your staff engaged
  - CEUs supporting CI in the acute care setting
  - Allow others to assist you in the journey
- Continue to evaluate the data
- Continue to look for CI opportunities which align with the organization.



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# Always Move Forward!



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# MQii: NYP's eCQM Journey...

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Louise Merriman, MS, RD, CDN  
***Administrative Director,  
Clinical Nutrition  
NewYork-Presbyterian  
Hospital***



Kristen Mathieson, MBA, RD, CDN  
***Project Lead,  
Clinical Nutrition  
NewYork-Presbyterian  
Hospital***

- Study Site Selection – Prevalence Monitoring
- PI Focus – Nutrition Screening
- Outcomes and Ongoing Focus



**NewYork-Presbyterian**  
The University Hospital of Columbia and Cornell

**7 Sites**  
**2,600 Beds**



# Study Site Selection - Prevalence Monitoring

2017	AH	MSCH	CU/MHB	WC	LM	WD	Lawrence	Total
2017 Adjusted Discharges*:	8045	7866	31349	35728	6768	4401	n/a	94157
2017 Identified Volume:	963	1013	5206	3967	989	454	n/a	12592
<b>2017 % Prevalence :</b>	<b>12.0%</b>	<b>12.9%</b>	<b>16.6%</b>	<b>11.1%</b>	<b>14.6%</b>	<b>10.3%</b>	<b>n/a</b>	<b>13.4%</b>
Annual Volume Target:	1050	1123	4919	4003	947	547	n/a	12589
Variance to Target:	-87	-110	287	-36	42	-93	n/a	3
Change in prevalence from 2016:	1.4%	0.8%	1.2%	0.0%	0.9%	0.4%	n/a	0.7%
<b>2018</b>								
2018 Projected Adjusted Discharges*:	8151	8284	32275	36047	6909	4585	11615	107866
<b>2018 % Prevalence Target :</b>	<b>12.0%</b>	<b>13.5%</b>	<b>17.0%</b>	<b>12.0%</b>	<b>14.5%</b>	<b>10.7%</b>	<b>10.0%</b>	<b>n/a</b>
Annual Volume Target:	978	1118	5487	4326	1002	491	864	13401
Monthly Volume Target:	82	93	457	360	83	41	72	1117
	*w/o OB, NICU, Newborn	*w/o OB, NICU, Newborn	*w/o Rehab	*w/o OB, NICU, Newborn, Rehab	*w/o OB, NICU, Newborn		*w/o OB, NICU, Newborn	

# MQii Outcomes

Quality Measure -	Baseline		
Completion of a Malnutrition Screening within 24 hours of Admission (Patients Age 18+ Years)	<b>Performance Score</b>		
	<b>69.70%</b>		
Completion of a Nutrition Assessment for Patients (Age 65+ Years) identified as At-Risk for Malnutrition within 24 hours of a Malnutrition Screening	<b>Performance Score</b>	<b>48 Hours</b>	<b>72 Hours</b>
	<b>43.90%</b>	<b>95.80%</b>	<b>100.00%</b>
Nutrition Care Plan for Patients (Age 65+ Years) identified as Malnourished after a Completed Nutrition Assessment	<b>Performance Score</b>		
	<b>99.06%</b>		
Appropriate Documentation of a Malnutrition Diagnosis for Patients (Age 65+ Years)	<b>Performance Score</b>		
	<b>99.06%</b>		

## PI Focus – Nutrition Screening

- Patients > 65 years with BMI < 23
- Patients previously admitted and diagnosed with malnutrition (Tableau)

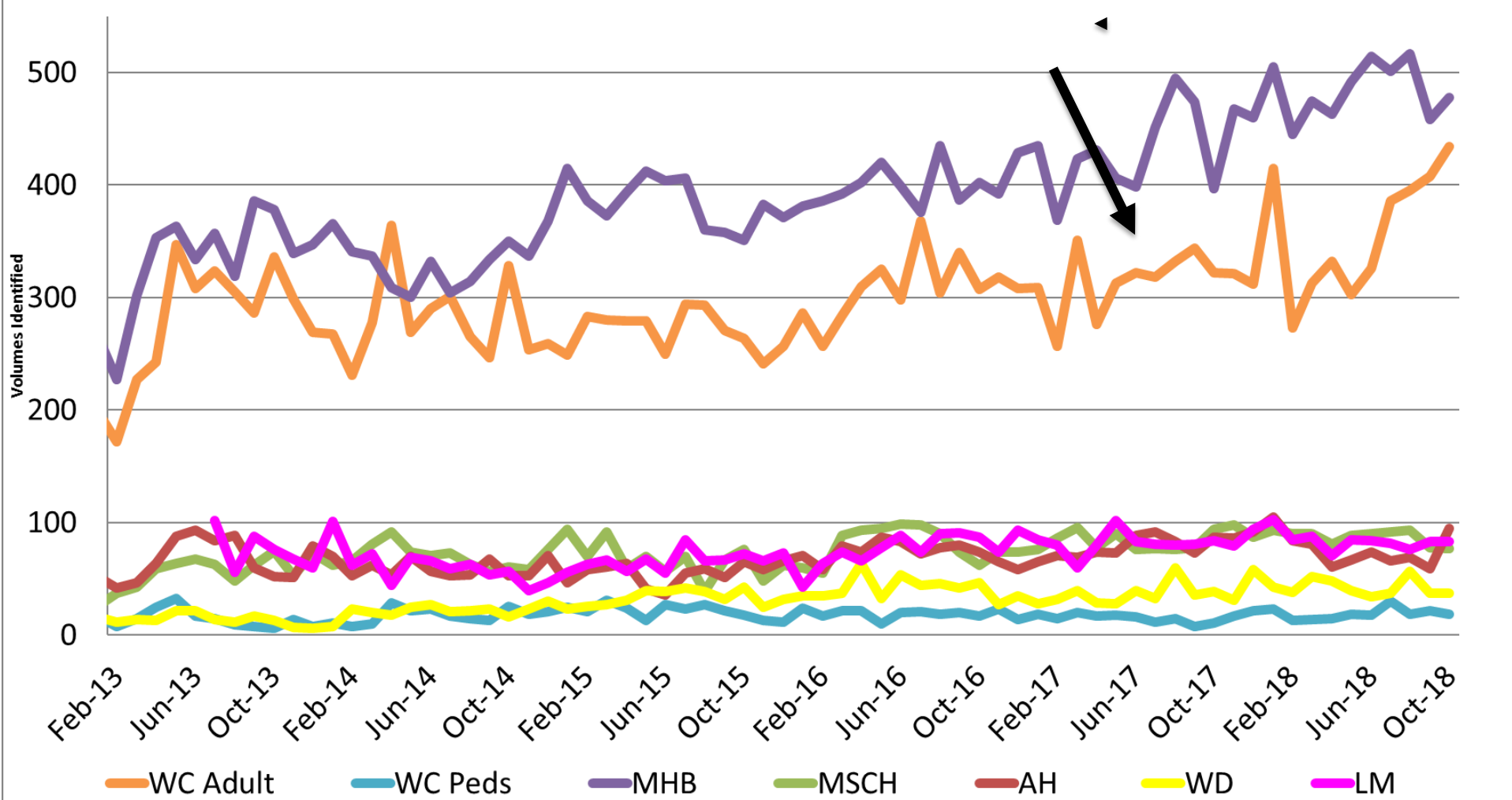
# MQii Outcomes

Quality Measure -	Baseline	Implementation		
Completion of a Malnutrition Screening within 24 hours of Admission (Patients Age 18+ Years)	<b>Performance Score</b>	<b>Performance Score</b>		
	<b>69.70%</b>	<b>59.50%</b>		
Completion of a Nutrition Assessment for Patients (Age 65+ Years) identified as At-Risk for Malnutrition within 24 hours of a Malnutrition Screening	<b>Performance Score</b>	<b>Performance Score</b>	<b>48 Hours</b>	<b>72 Hours</b>
	<b>43.90%</b>	<b>44.80%</b>	<b>96.00%</b>	<b>100.00%</b>
Nutrition Care Plan for Patients (Age 65+ Years) identified as Malnourished after a Completed Nutrition Assessment	<b>Performance Score</b>	<b>Performance Score</b>		
	<b>99.06%</b>	<b>98.08%</b>		
Appropriate Documentation of a Malnutrition Diagnosis for Patients (Age 65+ Years)	<b>Performance Score</b>	<b>Performance Score</b>		
	<b>99.06%</b>	<b>98.08%</b>		

# MQii Outcomes

Quality Measure -	Baseline	Implementation	Post-Implementation		
Completion of a Malnutrition Screening within 24 hours of Admission (Patients Age 18+ Years)	<b>Performance Score</b>	<b>Performance Score</b>	<b>Performance Score</b>		
	<b>69.70%</b>	<b>59.50%</b>	<b>64.63%</b>		
Completion of a Nutrition Assessment for Patients (Age 65+ Years) identified as At-Risk for Malnutrition within 24 hours of a Malnutrition Screening	<b>Performance Score</b>	<b>Performance Score</b>	<b>Performance Score</b>	<b>48 Hours</b>	<b>72 Hours</b>
	<b>43.90%</b>	<b>44.80%</b>	<b>45.96%</b>	<b>92.65%</b>	<b>100.00%</b>
Nutrition Care Plan for Patients (Age 65+ Years) identified as Malnourished after a Completed Nutrition Assessment	<b>Performance Score</b>	<b>Performance Score</b>	<b>Performance Score</b>		
	<b>99.06%</b>	<b>98.08%</b>	<b>100%</b>		
Appropriate Documentation of a Malnutrition Diagnosis for Patients (Age 65+ Years)	<b>Performance Score</b>	<b>Performance Score</b>	<b>Performance Score</b>		
	<b>99.06%</b>	<b>98.08%</b>	<b>99.10%</b>		

### Malnutrition Identified by Registered Dietitian (All Sites)



# Global Leadership Initiative on Malnutrition (GLIM)

Phenotypic (findings) criteria – at least 1		Etiologic (cause) criteria – at least 1	
1. Weight loss % (unintended)	5% in $\leq 6$ months, or 10% in $> 6$ months	1. Reduced nutritional intake	$< 50\%$ of requirement $> 1$ week, or any reduction $> 2$ weeks, or chronic GI disorders with adverse nutrition impact
2. Low BMI	$< 20 \text{ kg/m}^2$ if $< 70$ years, or $< 22 \text{ kg/m}^2$ if $\geq 70$ years	2. Inflammation	Chronic disease, or acute disease/injury with severe systemic inflammation, or socioeconomic/environmental starvation
3. Reduced muscle mass	Reduced according to objective measures and/or physical exam		

Moderate (Stage 1)		Severe (Stage 2)	
1. Weight loss % (unintended)	5%-10% in $\leq 6$ months, or 10%-20% in $> 6$ months	1. Weight loss % (unintended)	$> 10\%$ in $\leq 6$ months, or $> 20\%$ in $> 6$ months
2. Low BMI	$< 20 \text{ kg/m}^2$ if $< 70$ years, or $< 22 \text{ kg/m}^2$ if $\geq 70$ years	2. Low BMI	$< 18.5 \text{ kg/m}^2$ if $< 70$ years, or $< 20 \text{ kg/m}^2$ if $\geq 70$ years
3. Reduced muscle mass	Mild-to-moderate deficit (per validated assessment methods)	3. Reduced muscle mass	Severe deficit (per validated assessment methods)

- The GLIM approach includes a set of readily available criteria that can be used in combination with existing diagnostic approaches, including the Academy/ASPEN malnutrition consensus characteristics.
- **The GLIM approach does not replace the Academy/ASPEN methodology at this time but may be used in conjunction with it.**



# 2019 Goals

Collaboration, collaboration, collaboration...

- Nursing Screening and Efficiencies
- House Staff and Medical Student Training with Documentation Improvement
- Roll-Out of PI Initiatives with Information Technology
- EPIC Design with Information Technology
- Ongoing development of Audit/Appeals Process/Monitoring with Coding, Finance and Corporate Compliance



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# ThedaCare Nutrition Risk Screen in Identification of Patients with Malnutrition

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Lori Hartz MS, RDN, CD Manager of  
Nutrition and Diabetes Education at  
ThedaCare



Cheryl Shockey MS, RDN, CD  
Lead Clinical Dietitian at ThedaCare

# Screen Versus Assessment – Our Journey

- Screen: a process identifying a patient at risk for malnutrition- ideally simple, reliable, and reproducible
- Assessment: complex process requiring a skilled clinician to obtain information to make diagnosis and intervention



## 2013 Publication

### FOR AND/ASPEN CONSENSUS ON MALNUTRITION CHARACTERISTICS: APPLICATION AND PRACTICE

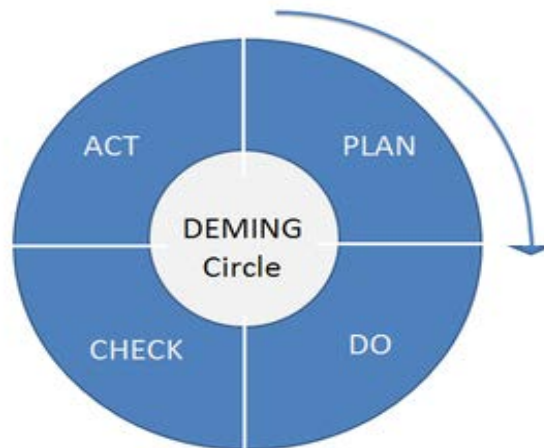
- Objective data/criteria to diagnosis malnutrition
- Required training and competency on NFPE. Angelica Gronke RD developed training/competency.

# Improvement Processes

- LEAN Methodology – PDSA
- Most of the defects occurred in the Nursing Nutrition Risk Screen due to inappropriate questions in the screen.
- RDs had developed a secondary informal screen reviewing the patient admit dx, BMI, level of care (intubated, on NS etc.)

# Screening Processes

- PDSA Team worked on refining the NRS (Nursing Nutrition Risk Screen) to be 3 vs 9 questions – completed w/i 8 hours of admit
- Cheryl Shockley RD worked on refining and defining the RD screen that is completed w/i 24 hours of admission
- All info found in the EMR



# ThedaCare Nutrition Risk Screen

## **PART 1: NURSING NUTRITION RISK SCREEN – COMPLETED W/I 8 HOURS OF ADMISSION**

- Unplanned weight loss >7 pounds within the last 30 days?
- Eaten <50% of normal intake for >5 days?
- Received enteral or parenteral nutrition within the last 30 days?
- If **'yes'** considered high risk and assessed by RD w/i 24 hours





## Part 2: Dietitian Nutrition Risk Screen

### HIGH RISK – RDN ASSESSES PATIENT W/I 24 HOURS

A. Does the patient have any of the following:

- Vented due to respiratory failure
- FTT/Malnutrition/Cachexia
- PEG or J-Tube Placement
- Short Bowel Syndrome or Malabsorption
- Order for TPN, Tube Feed or Calorie Count
- Nutrition Consult



## Part 2: Dietitian Nutrition Risk Screen (Continued)

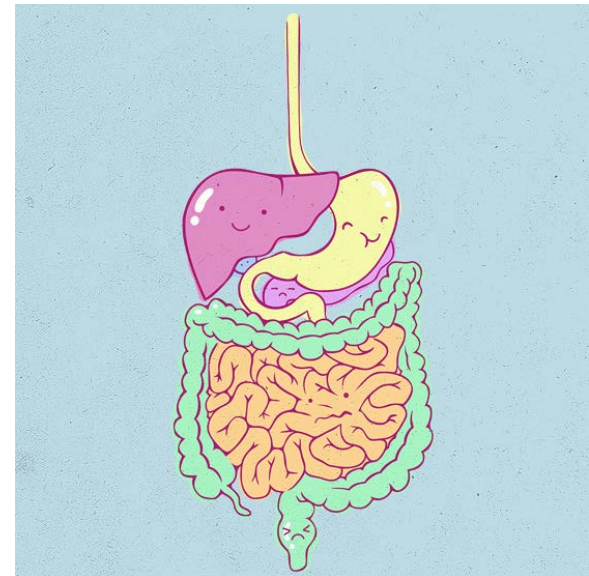
B. Does the patient have any of the following? If **yes**, High Risk. RDN assessment within 24-48 hours of admission:

- Major GI surgery (Whipple, Gastrectomy, Esophagogastrectomy, Ileostomy, Roux-En-Y etc)
- Liver Disease
- Kidney Failure with Renal Replacement Therapy
- Dysphagia
- Non-healing wound (flaps/debridement) or Stage II-IV Wounds
- Hip Fracture
- CVA with NPO Diet Order
- Pureed and/or Thickened Liquid Diet Order
- Protein/Calorie Supplement Ordered
- Medical Oncology Admission, which included admission due to cancer diagnosis, cancer-related symptoms, chemotherapy or radiation. Surgical Oncology was not included
- Renal Diet or Low-Protein or High Protein Diet Orders
- BMI<18.5

## Part 2: Dietitian Nutrition Risk Screen (Continued)

C. Does the patient have any of the following? If **yes**, Moderate Risk. RDN assessment w/i 48-72 hours of admission:

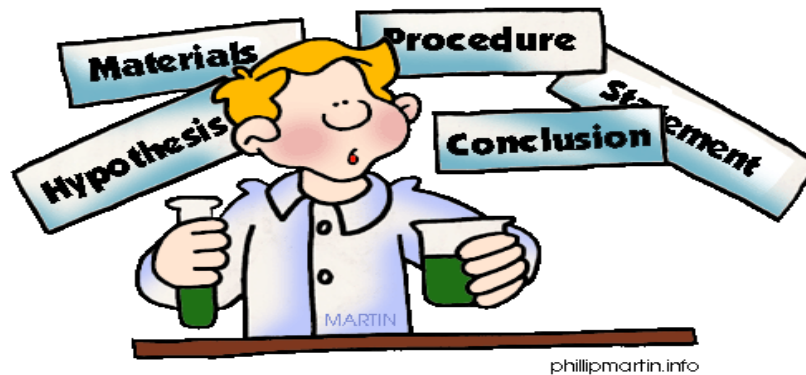
- Small Bowel Obstruction
- Pancreatitis
- Diabetic Ketoacidosis
- Amputation
- Inflammatory Bowel Disease
- Celiac Disease
- Dementia/Altered Mental Status



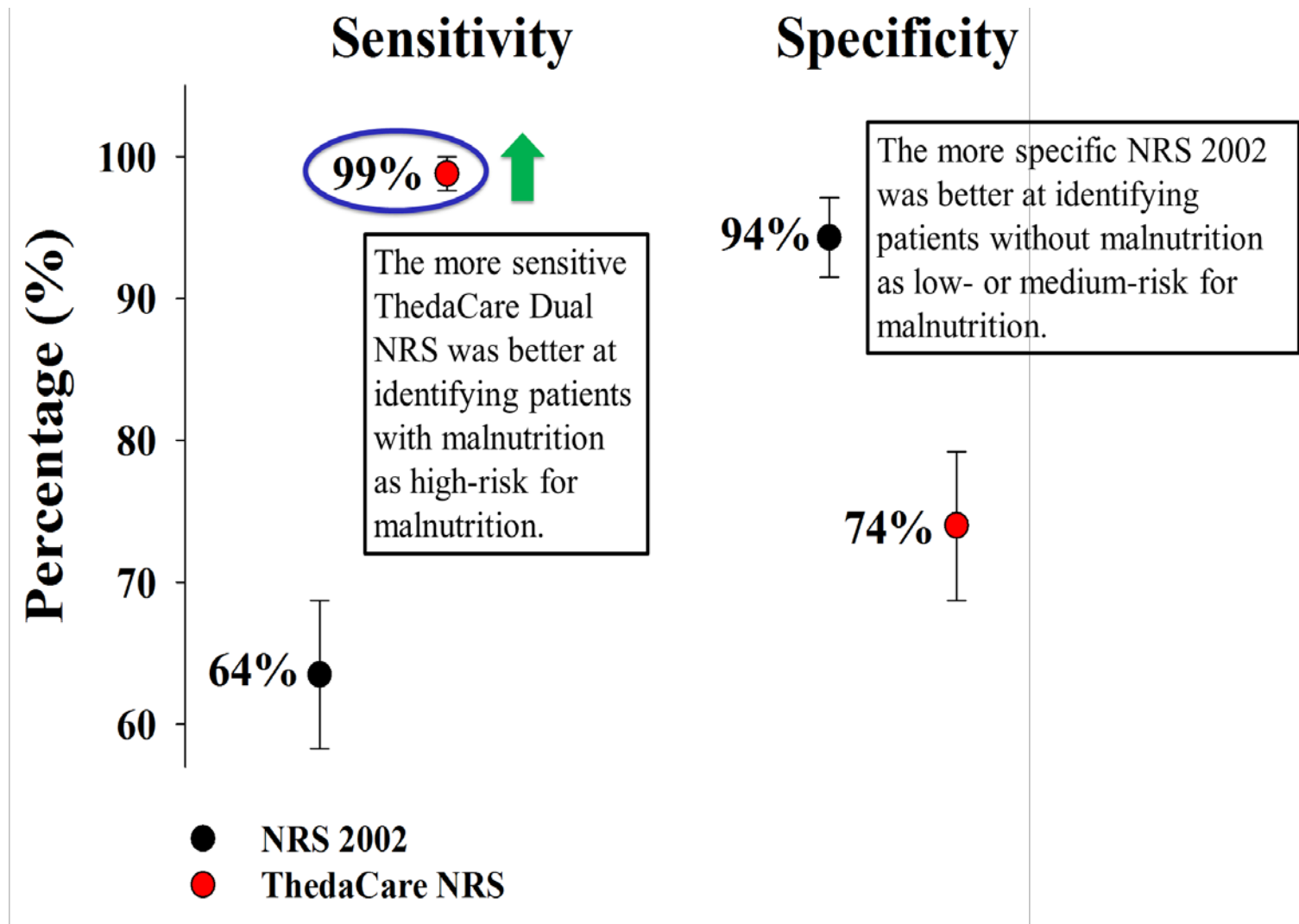
If All **No**, patient is 'Low Risk'. RDN delegates to NDTR to rescreen in 5-7 days

# Clinical Trial Comparing the ThedaCare NRS and the NRS 2002

- Clinical Trial NCT 02585245
- Appleton and Neenah Regional Hospitals – all non ICU patients
- 594 Patients aged  $63 \pm 16$  years



# Results: Compare the ThedaCare NRS to NRS 2002:



<b>Malnutrition Diagnosis<sup>1</sup></b>	<b>Negative</b>	<b>Positive</b>	<b><i>P</i></b>
M/F, n	189/221	87/97	0.79 <sup>†</sup>
M/F, %	46/54	47/53	.
Age, years <sup>2</sup>	61 ± 15	66 ± 15	0.0005 <sup>‡</sup>
LOS, days <sup>2</sup>	3.5 ± 4.0	4.8 ± 3.8	<0.0001 <sup>‡</sup>
30-d Hospital Readmission Ratio	25/385 (6%)	26/158 (14%)	0.0023 <sup>†</sup>

---

**ThedaCare NRS**

17 ± 1 seconds



***P***

**NRS 2002**

9 ± 1 minutes

<0.0001

---

# Current Work

- Increase % of patient the RDN diagnosis with malnutrition and provider diagnosis
- Identify patient with malnutrition outside of the hospitals
- Collaboration on discharge planning to decrease readmission



# Questions?



10 mins