

# Sustained Quality Improvement of Echo Reporting in a Pediatric Echocardiography Lab



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## Background

- Excellent communication is key to ensure accurate information provided
- Important factor in superior patient care
- Serial pediatric transthoracic echocardiogram (pTTE) studies follow changes in cardiac structure and function
- Providing previous study comparison in echo report is effective method to communicate key changes
- We did not have a consistent system to report comparison

## Aim

- Increase number of pTTE comparison statement from baseline to 100% six months after starting and maintain 100% comparison reporting long-term

## Improvement Process

- Root causes
  - Lack of comparison statement does not alert ordering provider of interpretation of change
  - Without a comparison statement it can be unclear if a difference is significant
  - Can be useful to next reading cardiologist to know specifically what the previous cardiologist thought of any changes in the earlier echo

## Methods

- 10 randomly selected pTTE studies for each of 8 reading cardiologists reviewed initially at 3 time points
  - Baseline (BD), Interim (ID), and Final (FD)
- BD collected and presented with discussion and input followed by reporting system updates (Improvement Process 1)
- ID presented and additional reporting system changes made based on further feedback (Improvement Process 2a and 2b)
- FD collected and presented.
- One year later, long-term data (LD) evaluated

## Results

Echo Reader	BD %	ID %	FD %	LD %
1	40	80	90	100
2	30	70	80	80
3	60	90	100	100
4	20	70	70	70
5	10	90	70	100
6	30	70	80	90
7	10	70	70	70
8	50	90	80	80
<b>Total</b>	<b>31</b>	<b>79</b>	<b>80</b>	<b>86</b>

## Conclusions

- 155% increase from BD to ID and sustained on LD analysis
- Discussing expectations and updating systems to make processes easier increases compliance and sustainability
- Ongoing evaluation of barriers to 100% compliance needed

#	Change Idea(s)	Measure(s)/Outcome(s)
1	Discuss with team & create echo reporting option to make use easier	Increase from 31 to 79%
2a	Add second reporting location per feedback from echo reader preferences	Overall remained stable 4/8 improved 2/8 no change 2/8 slight decrease
2b	Add date of comparison option per further feedback	

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