

# Increasing the Use of a Patient-Centered Care Tool

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# Objectives

At the completion of the session, the participants will be able to:

- Discuss the **relevance** of the EHR to patient education.
- Discuss **next steps** in using this quality improvement.
- Discuss ideas for **populations who might benefit**.

# Background

- Underutilized communication and education tool
  - Implications for health care management
  - Far beyond the doors of the physical clinical practice
- Interventions to facilitate use of this tool
  - Implications for patient education and interaction
  - A medium to save time and expense

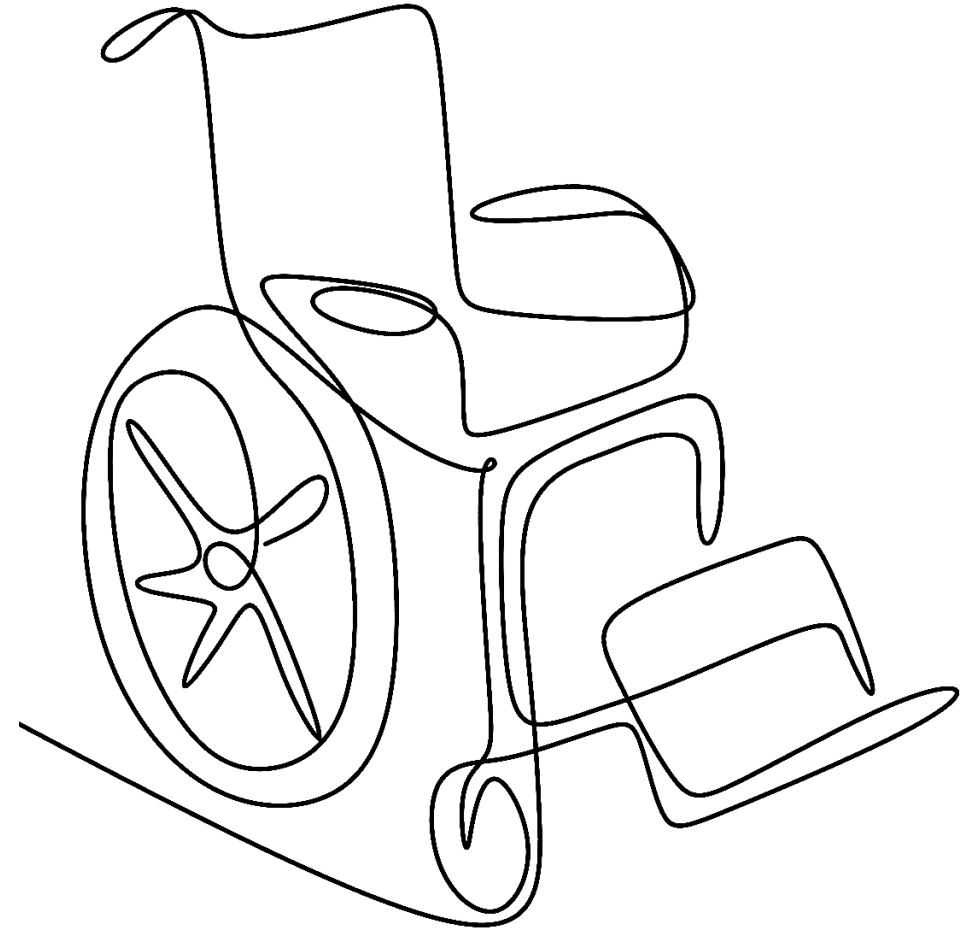
# Setting

- Midwestern health care system (>1000 beds)
- Academic teaching hospital
- Ventricular Assist Device (VAD) clinic



# Population

- VAD population
- Range of ages and backgrounds
- High allostatic load
  - Fragile
  - Closely followed



# Population (Cont.)

- **High allostatic load**

- End stage heart failure
- Maximum 25% ejection fraction by definition
- Bridge to transplant

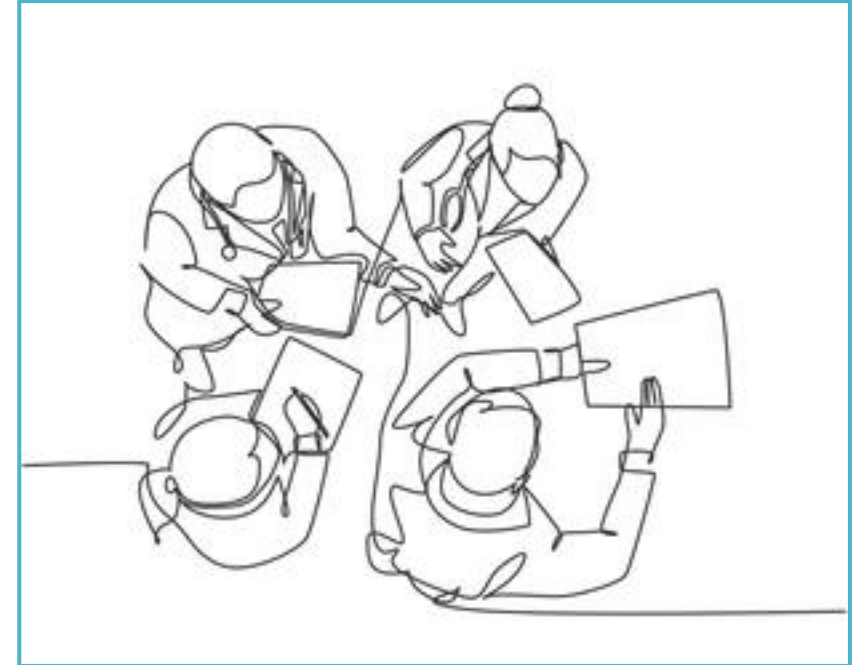
- **Required life-style changes**

- Water exposure limitations
- Dressing changes
- Drive line through chest wall
- Batteries



# Population (Cont.)

- Closely followed
  - Regular full day appointments each month
  - Device queries
  - On call staff for 24/7 contact
    - Staff response to ED visits where possible
  - Staff follow up for any inpatient stays
  - Travel precautions
    - Interstate
    - Over borders



# Aims: Overall Aims

## Overall Aims:

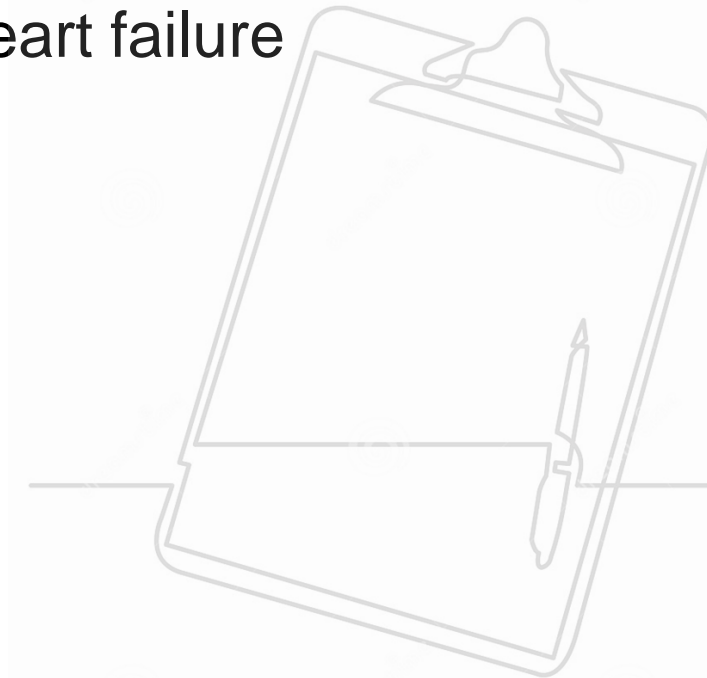
- Increase use of the patient portal
- Increase patient access of educational materials available on the portal



# Aims: Sub Aims

## Sub Aims:

- Patient access to portal increase 5%
- Evaluate patient access of the patient portal, comfort with the portal, and use of current educational material on heart failure
- Implement patient access strategies
- Evaluate patient and system outcomes



# Methods

- Pre-Post Qualitative and Quantitative Project
- Recruitment & Sampling
  - n=10 due to Covid 19
  - Convenience sampling by necessity
  - Self-selection for participation via email response and telephone consent
  - Staff-suggested patients



# Methods: Pre/ post-intervention design

## Methods & Interventions

- Planning and education meetings with unit Nursing Director
- Staff meetings with health care providers, research analysts, and information technologists
- Convenience sample recruitment N=10 (patients)
- Pre and Post patient & staff surveys developed, tested, submitted
- Education interventions with patients and providers

# Methods: Data

- Descriptive analysis of quantitative and qualitative data
- Data Collection Tools
  - Emails
  - Pre & Post Surveys
- Patient characteristics and portal use
- Staff satisfaction with implementation
- Web-based exercise to assess comprehension
- Observational data at all interactions



# Methods: Timeline

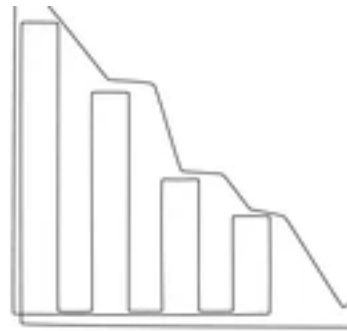
- Baseline data November 2020 through February of 2021
- Intervention began in November 2020 with educational sessions with patients
- Educational sessions with a nurse educator leader January 2021, additional session February 2021 (sustainability intervention)

# Methods (Cont.)

- Likert scale surveys with added open-ended questions
- Education with patients and health care providers
- Primary implementor attendance at staff meetings with health care providers, research analysts, and information technologists
- Primary implementor shadowing providers in clinic
- Project design based on these interactions

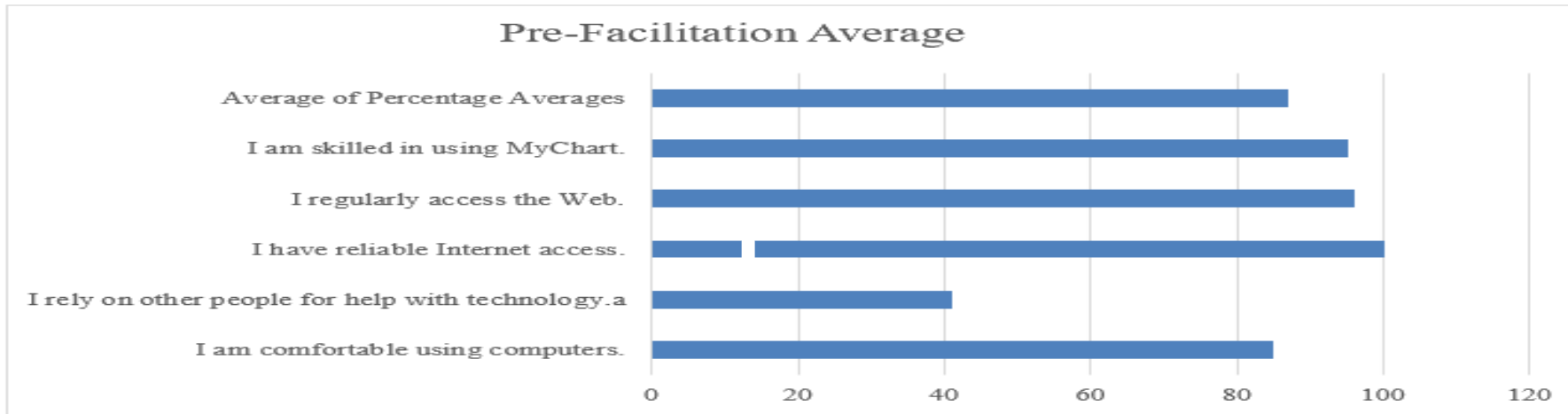
# Analysis

- Qualtrics software for statistical testing
  - Results exported to Microsoft Excel
- A web-based exercise assessed comprehension by percentage of correct answers.
- Observational data
  - Documented at all interactions
  - Analyzed for themes

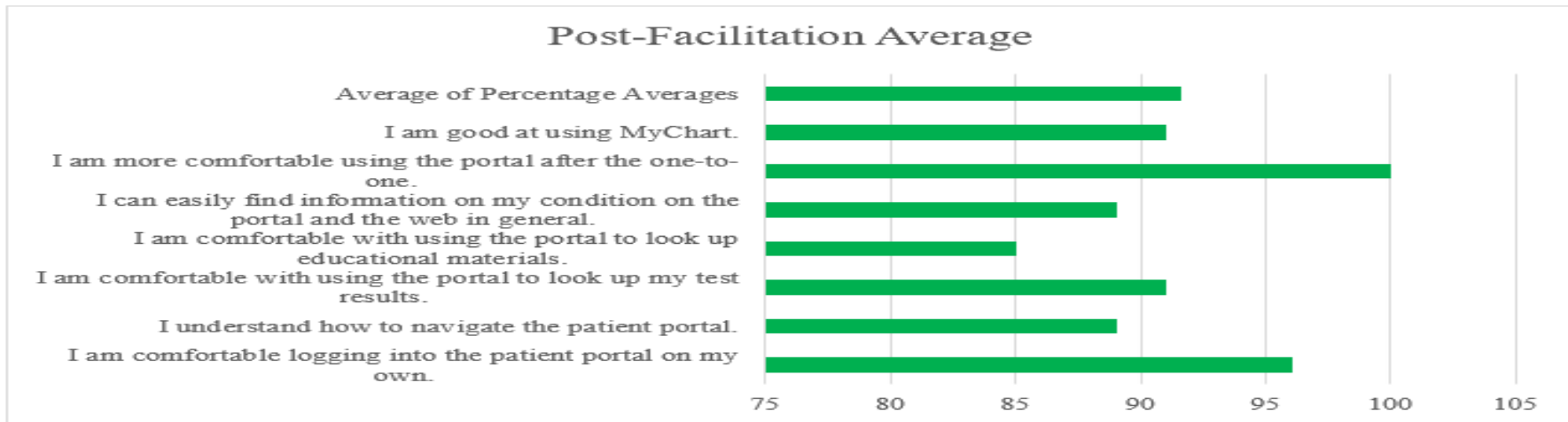


# Results

## *Patient Characteristics Surveys, Percentage Agreement with Question¶*

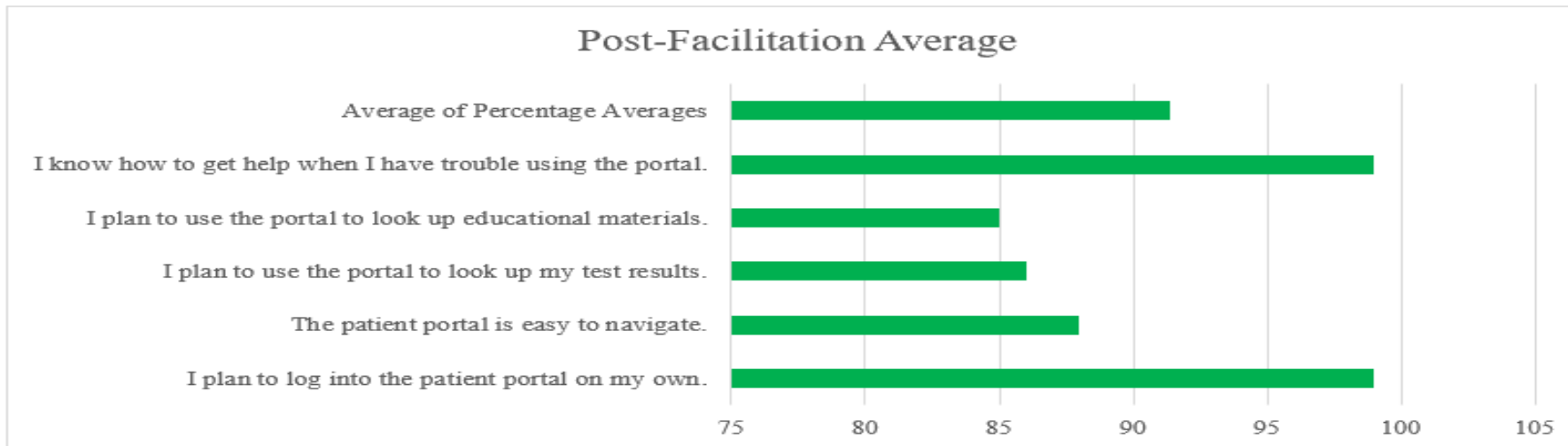
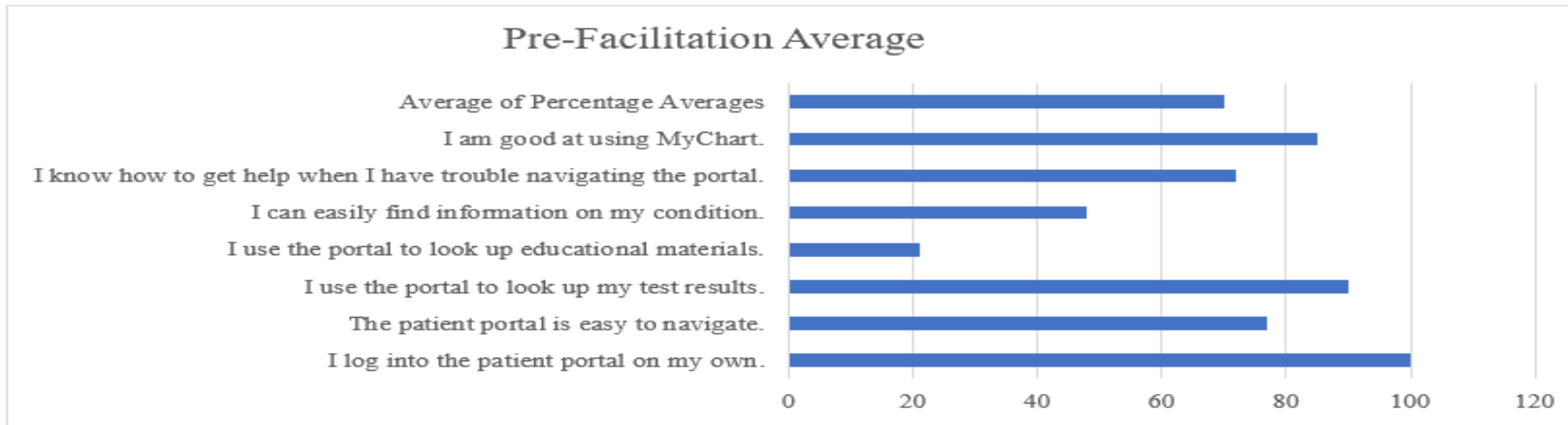


*Note:* “I rely on other people to help with technology” represents a question deliberately intended to elicit a response not congruent with the other responses.¶



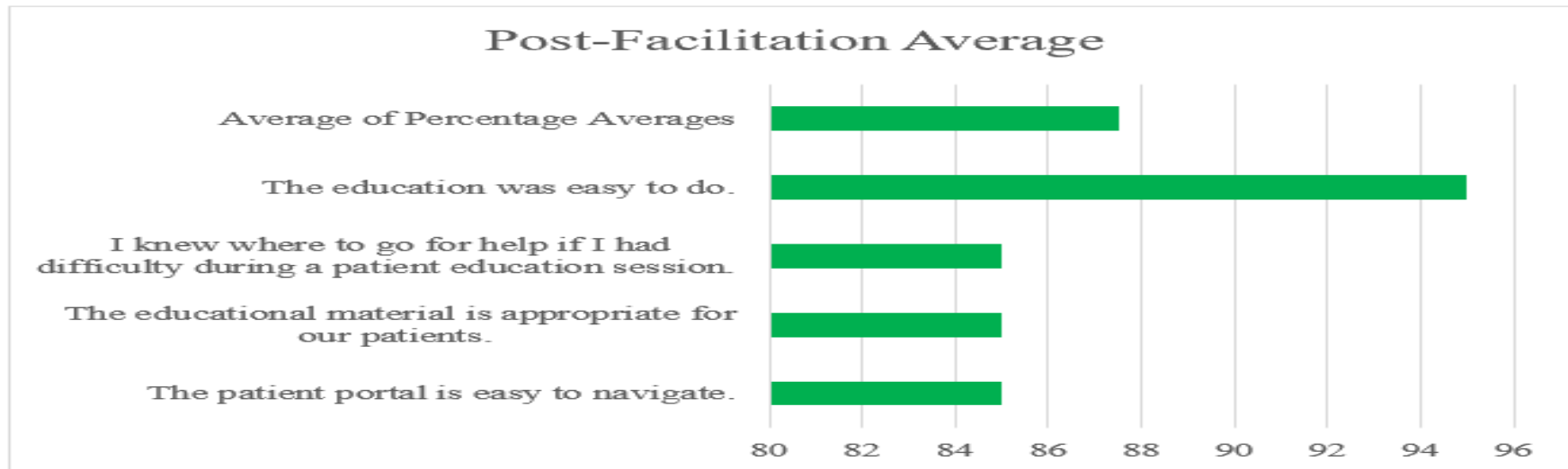
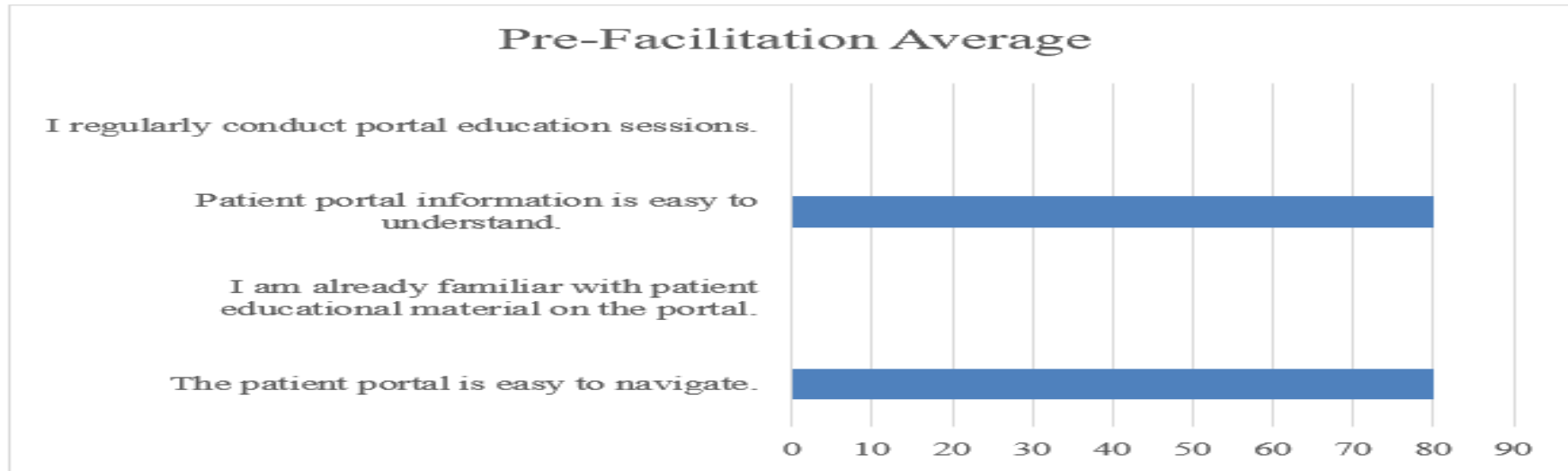
# Results (Cont.)

*Patient-Use-Surveys, -Percentage-Agreement-with-Question¶*



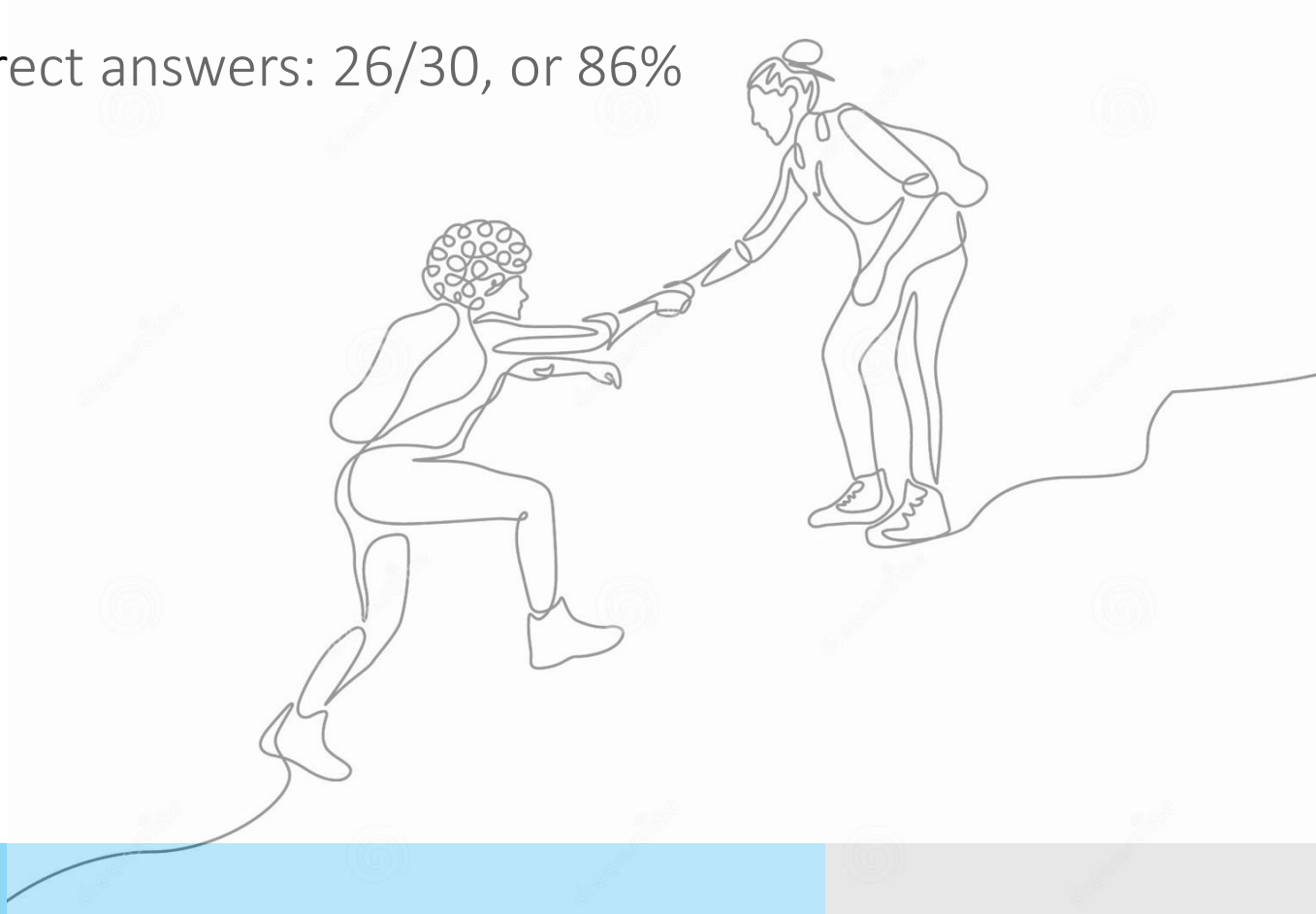
# Results (Cont.)

*Staff-Teaching-Satisfaction-Surveys, -Percentage-Agreement-with-Question*



# Results (Cont.)

- Web-based exercise
  - Comprehension percentage
    - Correct answers: 26/30, or 86%



# Results: Observations

## Observations

- Staff unaware of information on portal
- Comfort with technology not tied to age
- Satisfaction with heart failure information on the portal
- Receptiveness of patients, families, and staff
- Positive response to education
- Covid 19: Barriers and incentives both

# Results: Observations (Cont.)

- Comfort with technology, health care literacy, and Internet access
- Patients positive about using the portal
- Universally noted improved comfort with portal use post-intervention.
- Universally noted satisfaction at having new educational materials from a reliable and accessible source
- Universal robust positive agreement that the session was helpful.

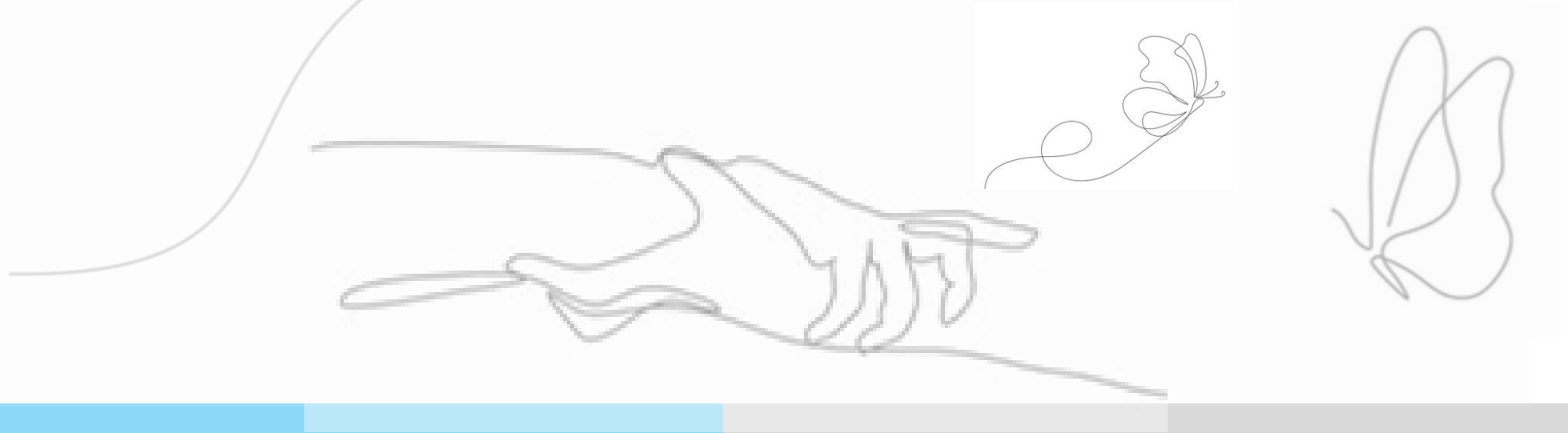
# Results: Observations (Cont.)

- Patients and Families

- Often familiar with one or two features but missed other features.
- Once apprised, patients and families expressed the intention to use them.

- Staff

- Expressed greater satisfaction in their ability to deliver education.



# Conclusions

## Usefulness of the Project

- Minimal time and outlay
- Enhanced self-navigation permits use of education at any time and place.
- Greater accessibility of reliable information for underserved populations
- Congruence with social distancing requirements
- Removes transport and time impedances
- Increases accessibility for chronically ill patients

# Conclusions (Cont.)

- Teaching enhanced **self-navigation** permitted patients to use the education already present on the portal, allowing **convenient access** at any time and place.
- All interviewees expressed **satisfaction** at having new educational materials from a source they could trust and readily access.
- Health care providers expressed **satisfaction** with having been not only made aware but handed a ready-made tool to educate patients.
- **Sustainability** was built on motivating and training staff to take over the education. The engagement of educators and patients demonstrated the maintainability of the project.
- The **constraints** of the COVID-19 pandemic required an extensive redesign of the intervention. However, they offered an invaluable perspective on using technology to engage patients and health care providers that might otherwise have gone unexplored.

# Questions

- How can the EHR be used in patient **education**?
- How is the EHR used at **your facility**?
- How would you conduct an education program about the EHR in your facility?
- What would you do **next** in this project?
- Where else** might this education be applied?

