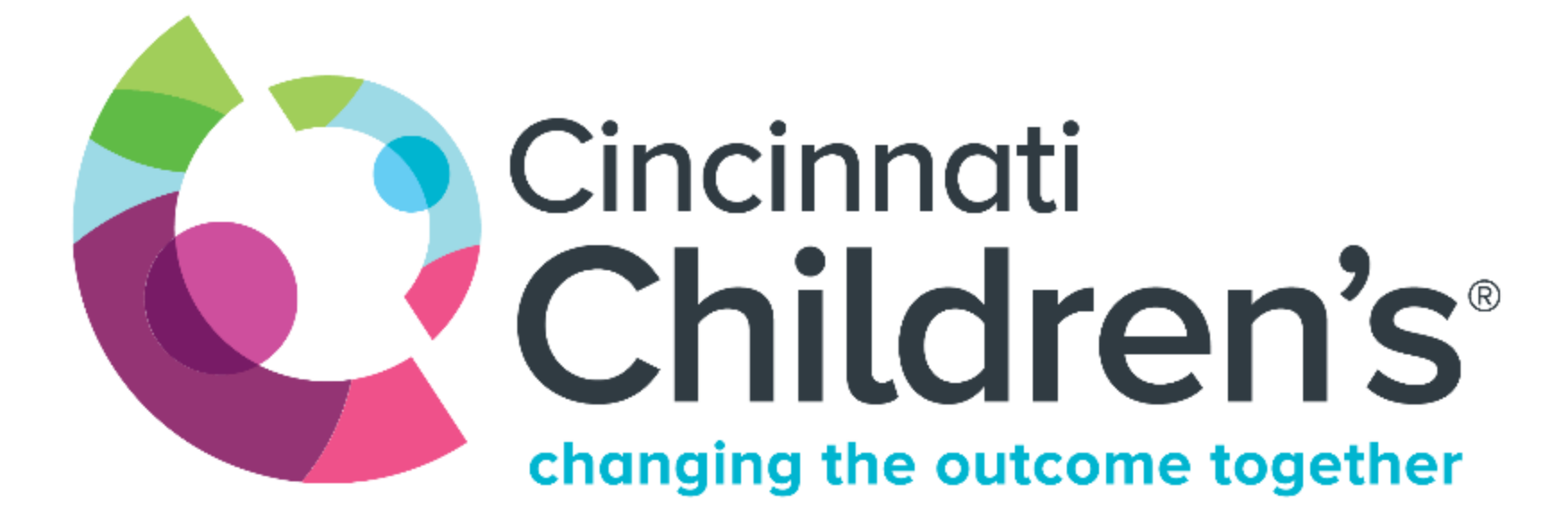


In Sync with Diabetes: Increasing Remote Upload of Insulin Pump Data among Children with Type 1 Diabetes

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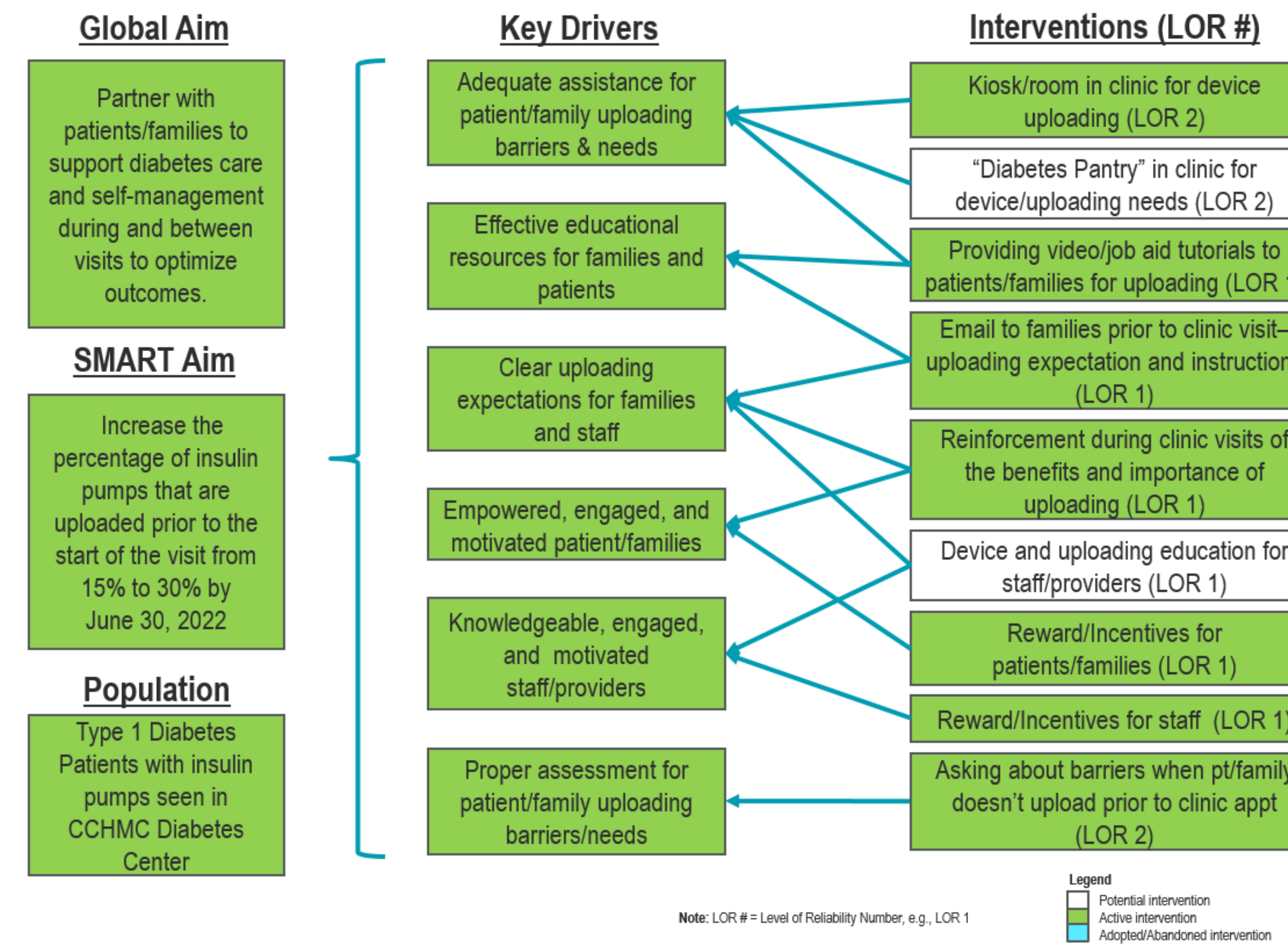
Background

- Insulin pump data upload is crucial for pediatric type 1 diabetes (T1D) care delivery
- Data upload by staff requires significant time, extends visit length, and cannot be performed at telemedicine visits
- Tools for remote data upload exist but are underutilized

SMART Aim

To increase the percentage of insulin pumps uploaded prior to T1D clinic visit at our institution from 15% to 30% by June 30, 2022.

Key Driver Diagram



Example: Uploading Instructions Handout

Sharing Diabetes Device Data with Cincinnati Children's Hospital
Call (513) 636-3005 or Email DiabetesCallCenter@cchmc.org for help

To use QR codes, open your smartphone's camera app, hold it over the QR code, and click on the web-link that pops up.

Device Type | **Platform**

Blood glucose meters
Step 1: If you have not created a Glooko account, email the Diabetes Center at DiabetesCallCenter@cchmc.org and you will receive an email invitation from Glooko to create an account connected to CCHMC.
If you have already created a Glooko account enter the following ProConnect™ Code in your settings: **sohmc**

Omnipod® insulin pumps
Step 2: Users of blood glucose meters that are non-Bluetooth compatible and users of Omnipod® 400 (not Omnipod® Dash), you need the Glooko® uploader to upload data from your meter or pump to share with the Diabetes Center. Access it using the QR code instructions.

In Pen®
Step 3: Omnipod® and Dexcom® users follow QR code instructions to link accounts. This allows you to see pump and CGM data in one place. Omnipod® PCM must be >50% charged before linking.
InPen® users with an Apple device follow QR code instructions to link accounts.

Dexcom® continuous glucose monitors
Step 4: To link your Dexcom® with Cincinnati Children's you will need a 12-digit Clarity® sharing code; email DiabetesCallCenter@cchmc.org to have this code generated for you.

InPen® & Dexcom®
Step 2: For mobile app users, download the Dexcom® Clarity® app and enter sharing code.
For Dexcom® receiver users, create a Dexcom® account, download the Clarity® uploading software, and enter sharing code using QR code instructions.

Further QR code instructions about sharing Clarity®

Glooko® technical support: 1(855)400-7808

Last Revised 5.1.2021

Methods

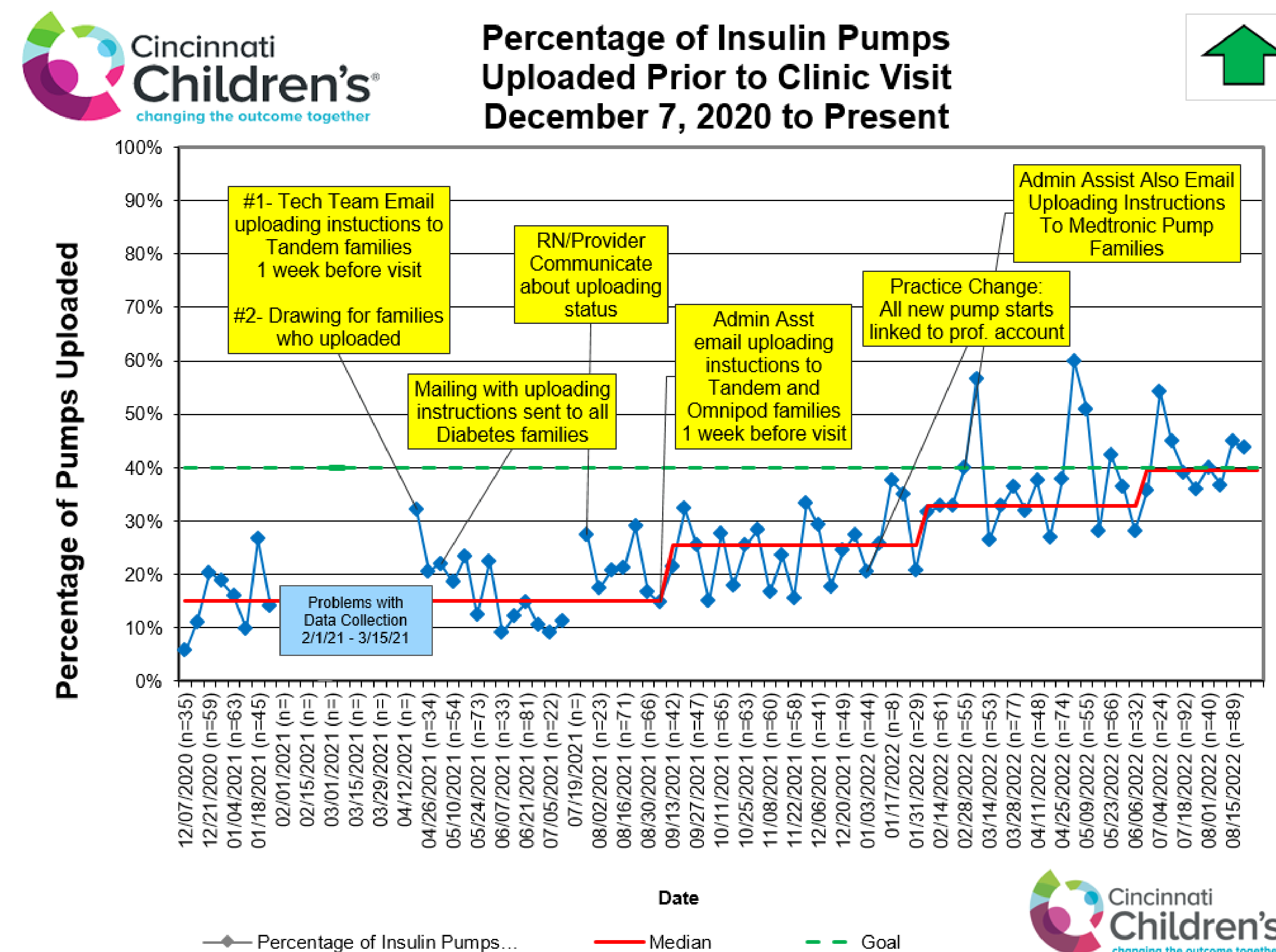
Our Team:

- Clinicians
- Educators
- Parents
- QI Specialists

Our Approach:

- Understand the baseline state of pump uploading in our diabetes center
- Develop a Key Driver Diagram (KDD) reflecting our theory for improvement
- Conduct Plan-Do-Study-Act cycles targeting key drivers
- Track outcomes of our interventions on a run chart

Run Chart



Results and Conclusions

We increased the percentage of insulin pumps uploaded prior to clinic visit by 25%, from 15% to 40%.

This 25% increase in pre-clinic pump loads corresponds to **over 50 more patients per month with insulin pump data uploaded** prior to clinic visit (and counting!)

Most Effective Interventions:

- Discussing the goal of pre-visit pump upload with families
- Emailing upload instructions to families one week before visit
- Syncing all new pumps to our professional cloud account during pump start

Future Directions:

- Assess and address gaps
- Study the impact of pre-visit upload on clinic cycle time
- Enhance remote monitoring of diabetes data
- Integrate device data into electronic medical record
- Facilitate artificial intelligence-guided modifications

