



CADDIE PROJECT PHASE II



MOVE TO BASE HOSPITAL JULY 2021



POPULATION HEALTH DIVISION
SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH

Centralized Ambulance Destination Determination for low acuity 911 transports

- Objectives of the project:
- Improve patient distribution by matching patient need to hospital capacity
 - Decrease surge events, improve diversion rates, keep patients in medical homes
- Improve EMS system efficiency
 - Improve ambulance patient offload times and decrease interfacility transfers
- Improve EMS system resiliency (improve ICU, MCI distribution)

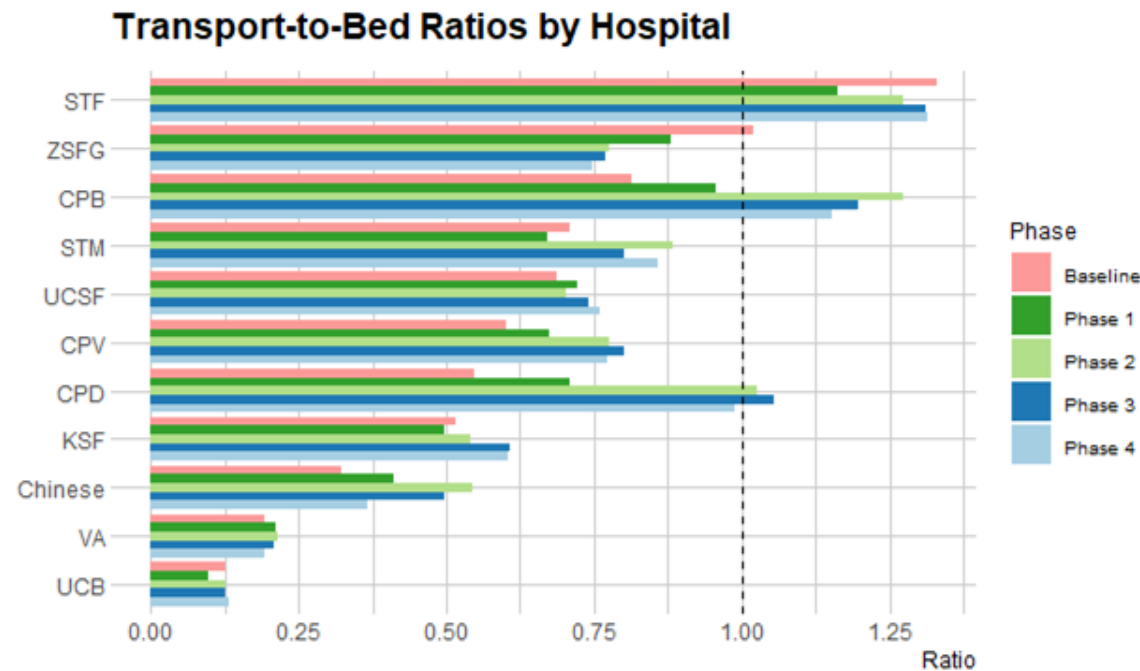


CADDie project history

- Initially designed as a 2 week pilot during CPMC hospital changes 2019
- Added to the EMS system surge plan to preserved ED capacity Apr 2020
- Improved use of Chinese hospital and SEHC Field Care Clinic
- Modifications during the course of the program to move from recommended destination to required, and added ICU capacity and 5150 patient destinations
- Current evaluation based only on EMS data
- Moderate and long term solutions in development



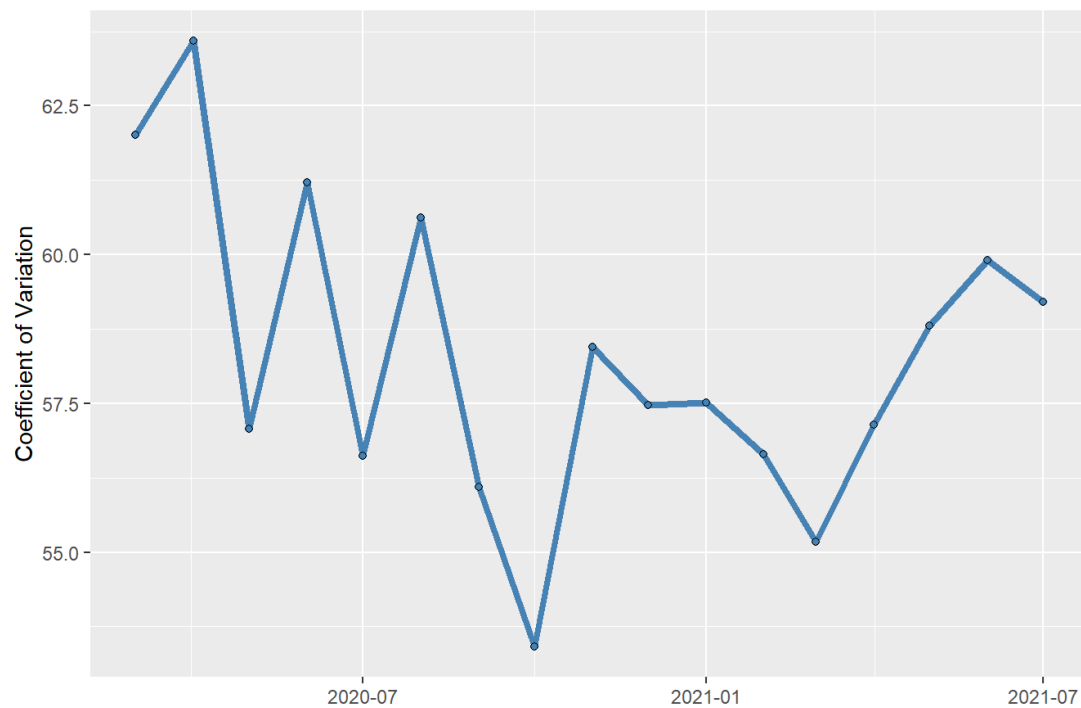
CADDie project results



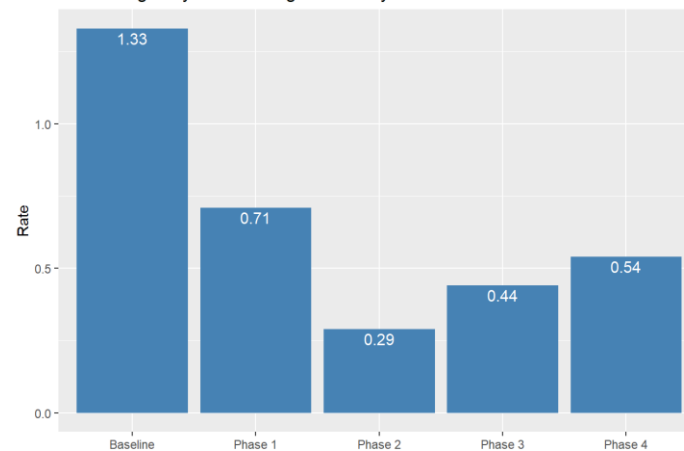
- Improved distribution of patients to approach desired ratio of 1.00 daily 911 EMS transports per ED bed
- Decreased surge events
- Had no effect on ambulance diversion
- Had no effect on Ambulance Patient Offload times

Decreases in EMS surge events

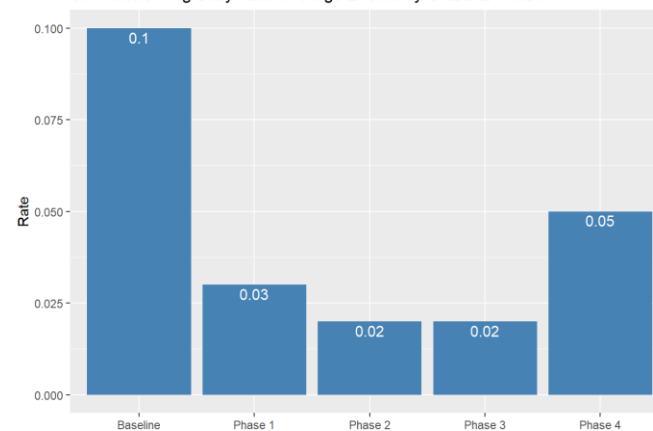
Average Daily Variation of Transport-to-Bed Ratio by Month



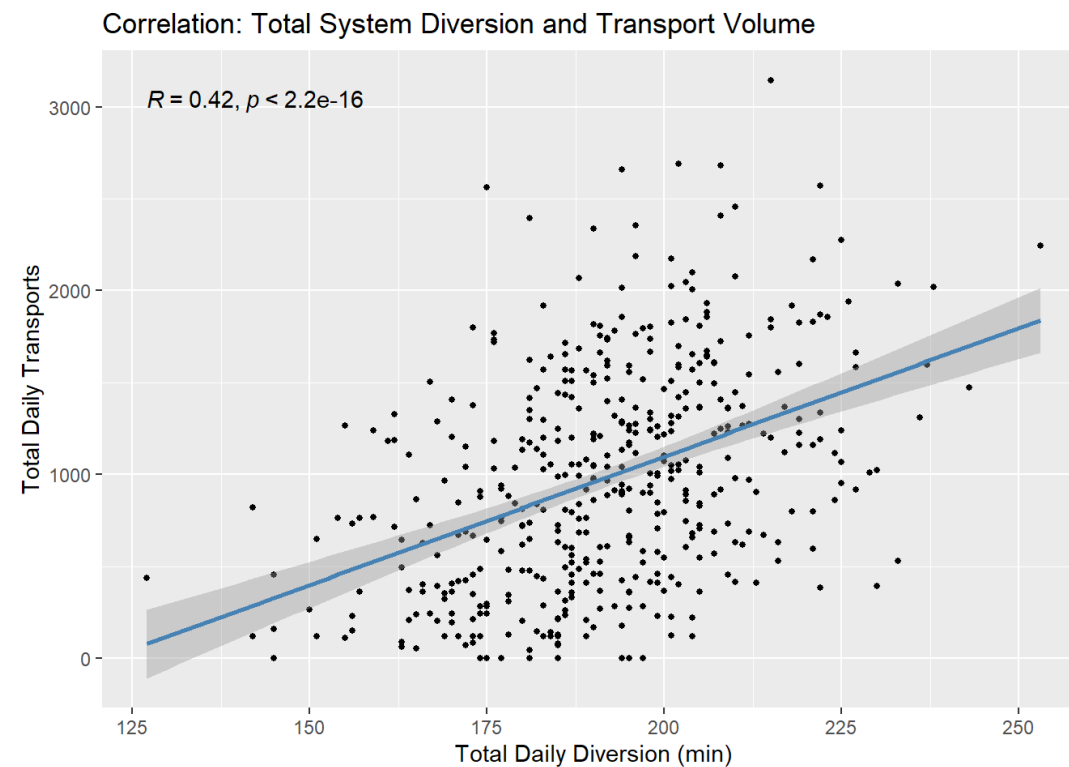
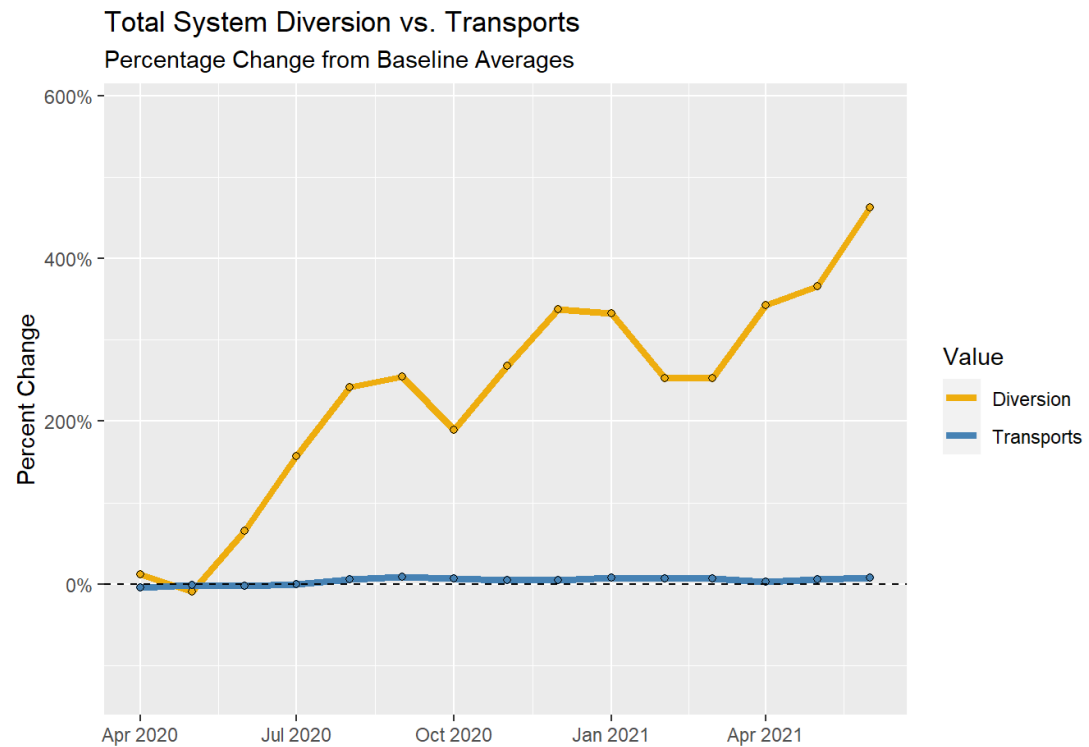
ZSFG: Avg Daily Rate of Surge Events by CADDiE Phase



St. Francis: Avg Daily Rate of Surge Events by CADDiE Phase



Ambulance Diversion



Destination match for patient “Medical Homes”

Convenience sample Oct 2020

0700 to 1900 on a Saturday

114 total calls

108 destination requested (95%)

89 went to requested facility (82%)

92 stayed within med home (85%)

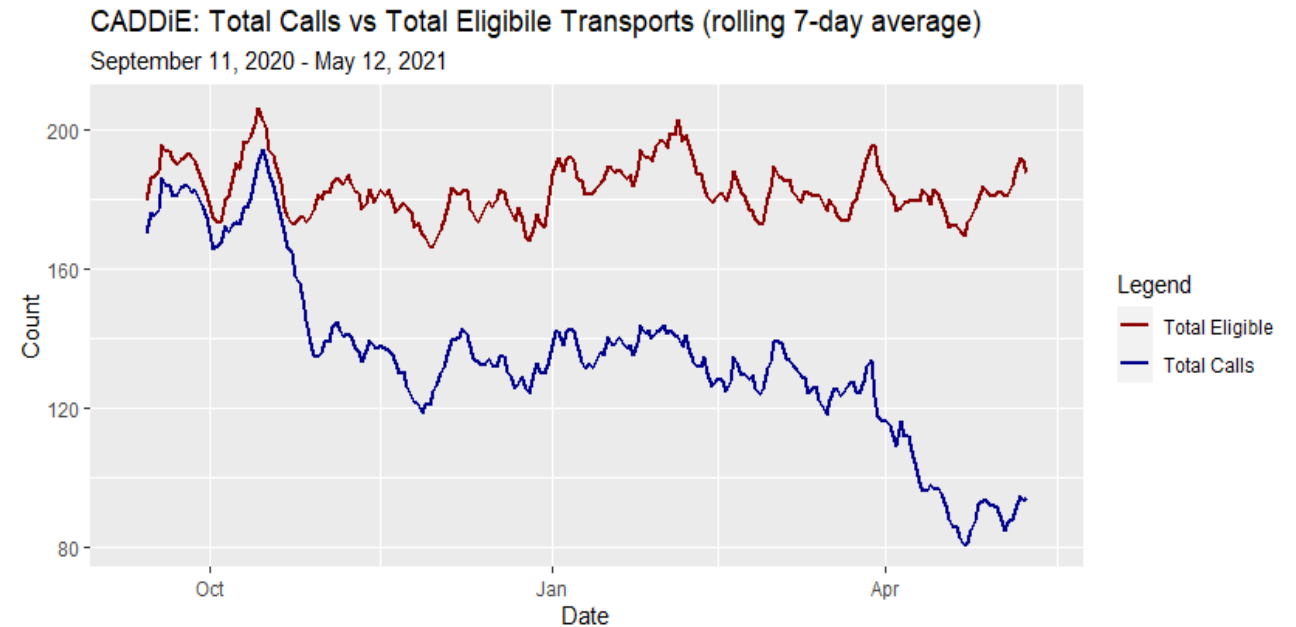
No diversion events

Health Care System	Request/Arrived at Med Home	Percent Match
CPMC	27/24	89 %
Kaiser	9/9	100 %
CommonSpirit Health	17/15	88 %
UCSF	18/17	94%
Chinese Hospital	4/4	100%
VAMC	1/1	100%
SFGH	32/22	69%
No Destination Request	6	NA
Total	108/92	85%



CADDie system issues

- Provider compliance
- Provider dissatisfaction
- Destination changes
- Patient resistance
- Evaluation challenges
- Cost



CADDie project further evaluation

- Increase data collection on medical homes/compliance and 5150 patient destinations
- Add hospital throughput data for comparisons
- Evaluate new hours and staffing paradigm
- Survey hospital staff on CADDie program



Next steps

- Utilize Staffing paradigm for more data collection
- Continue/expand data collection and analysis to determine patient and economic impact
- Eventual transfer of function to 911 dispatch center with RN triage (target date December 2022)
- Initiate review/evaluation of ambulance destination and diversion policies

