2017-2018 Resident and Fellow Quality Improvement Incentive Program

Participating Programs:

- Anesthesiology Residency
- Cardiology Fellowship
- Dermatology Residency
- Emergency Medicine Residency
- General Surgery Residency
- Gyn Onc Fellowship
- Hematology/Oncology Fellowship
- Hospice and Palliative Care Medicine Fellowship
- Internal Medicine Residency
- Medical Genetics Residency
- Neonatology Fellowship
- Neurological Surgery Residency
- Neurology Residency
- OB/GYN Residency
- Ophthalmology Residency
- Orthopaedic Surgery Residency
- Otolaryngology Residency
- Pediatric Anesthesia Fellowship
- Pediatric Cardiology Fellowship
- Pediatric Critical Care Fellowship
- Pediatrics Residency
- Plastic Surgery Residency
- Psychiatry Residency
- Pulmonary & Critical Care Fellowship
- Radiation Oncology Residency
- Radiology and Biomedical Imaging Residency
- Reproductive Endocrinology and Infertility Fellowship
- Urology Residency
<table>
<thead>
<tr>
<th>Program</th>
<th>Target/Goal</th>
<th>Resident/Fellow</th>
<th>Name of the Faculty QI lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesiology Residency</td>
<td>Appropriate use of neuromuscular monitoring and reversal agents in patients who have received neuromuscular blocking drugs (NMBDs) in at least 75% of patients cared for by residents, cumulative over the 2017-18 year.</td>
<td>Jack Jeng; Lei Xu; Jake Cecilia; Shona Lee</td>
<td>Matthias Braehler; Alexandra Anderson</td>
</tr>
<tr>
<td>Cardiology Fellowship</td>
<td>Screen at least 80% of adult outpatients for active tobacco use. and provide at least 80% of patients who self-identify as active tobacco users with smoking cessation counseling and resources, cumulative over the 2017-18 year.</td>
<td>Jeremy Tietjens; Blake Charlton</td>
<td>Krishan Soni</td>
</tr>
<tr>
<td>Dermatology Residency</td>
<td>Decrease the amount spent on unnecessary testing per patient on isotretinoin by 25%, from $217 (baseline) to less than $163, cumulative over the 2017-18 year.</td>
<td>Jason Meyer; Tim Schmidt</td>
<td>Jack Resneck</td>
</tr>
<tr>
<td>Emergency Medicine Residency</td>
<td>Provide language-specific discharge instructions to at least 42% of patients with non-English preference, cumulative over the 2017-18 year.</td>
<td>Jessica Paz; Julia Chang; Cortlyn Brown</td>
<td>Steve Polevoi; Jacqueline Nemer</td>
</tr>
<tr>
<td>Gastroenterology Fellowship</td>
<td>Improve the percent of patients who have an acceptable bowel prep to 90% cumulative over the 2017-18 academic year.</td>
<td>Roshan Patel</td>
<td>Aparajita Singh</td>
</tr>
<tr>
<td>General Surgery Residency</td>
<td>75% resident compliance in ordering the &quot;MD Delirium orderset&quot; either in the post-operative order set or within 6 hours of admission, cumulative Oct 1-June 30.</td>
<td>Jenny Kaplan; Steve Wisel; Michael Zobel</td>
<td>Rytutar Hirose</td>
</tr>
<tr>
<td>Gyn Onc Fellowship</td>
<td>Screen and document financial toxicity risk for at least 30% of eligible patients cumulatively over academic year. Patients who screen positive will be referred to appropriate resources, cumulative over the 2017-18 year.</td>
<td>Megan Swanson</td>
<td>Pelin Cinar</td>
</tr>
<tr>
<td>Hem/Onc Fellowship</td>
<td>Screen and document financial toxicity risk for at least 30% of eligible patients cumulatively over academic year. Patients who screen positive will be referred to appropriate resources, cumulative over the 2017-18 year.</td>
<td>Hala Borno; Li-Wen Huang; Sam Brondfield; Claire Mulvey</td>
<td>Pelin Cinar</td>
</tr>
<tr>
<td>Hospice and Palliative Care Medicine Fellowship</td>
<td>Among palliative care consultations for the indication of &quot;Advance Care Planning/Goals of Care,&quot; fellows will increase the documentation of GOC and treatment preferences, or an attempt to discuss these topics, in the Advance Care Planning from 54% to 80%, cumulative over the 2017-18 year.</td>
<td>Jessi Humphreys; Brieze Keeley; Laura Schoenherr; Jennifer Olenik</td>
<td>Giovanni Elia</td>
</tr>
<tr>
<td>Internal Medicine Residency</td>
<td>75% of all patients screening at risk for delirium (AWOL+) or positive for delirium (Nu-DESC+) will have delirium order set implemented within 12 hours in 3 out of 4 best performing quarters.</td>
<td>Jin Ge; Nicole Kim; Leslie Suen; Serge Gajic</td>
<td>Cat Lau; Stephanie Rogers</td>
</tr>
<tr>
<td>Medical Genetics Residency</td>
<td>A 20% decrease in &quot;time to run&quot; from the date that the patient is seen to the date on which the test is actually run.</td>
<td>Daniah Beleford; Victoria Berger</td>
<td>Shilpa Chetty</td>
</tr>
<tr>
<td>Neonatology Fellowship</td>
<td>Increase the percentage of families receiving written communication from the NICU team on the medical status of their baby from from 0% to 80% or greater by June 30, 2018.</td>
<td>Rachael Beckert</td>
<td>Janet Shimotake</td>
</tr>
<tr>
<td>Neurological Surgery Residency</td>
<td>Document presence of drains and indications/requirements for the drains in at least 80% of patients, cumulative over the 2017-18 year.</td>
<td>Derek Southwell; Ramin Morshed</td>
<td>Sujatha Sankaran</td>
</tr>
<tr>
<td>Neurology Residency</td>
<td>Ensure POLST form in medical record for 75% of patients discharged from neurology services who are not &quot;Full Code,&quot; cumulative over the 2017-18 year.</td>
<td>Jassamin Connell-Price; Thomas Ragole; Brian Sauer; Jeremy Tanner</td>
<td>Andy Josephson</td>
</tr>
<tr>
<td>OB/GYN Residency</td>
<td>Document completion of cesarean section postoperative debriefing process in 65% of cesarean sections in the UCSF Birth Center, for 3 of 4 quarters, over the 2017-18 year.</td>
<td>Martha Tesfalul</td>
<td>Dr. Ben Li</td>
</tr>
<tr>
<td>Ophthalmology Residency</td>
<td>Increase the outpatient follow-up adherence from 33% to 50% for 3-out-of-4 quarters for Moffitt-Long inpatients seen as ophthalmology consults with follow-up scheduled in ophthalmology clinic.</td>
<td>Catherine Sun</td>
<td>Reza Vagefi</td>
</tr>
<tr>
<td>Orthopaedic Surgery Residency</td>
<td>Reduce total opiates prescribed by 10% in orthopaedic surgery patients admitted post-surgery (excluding patients with chronic opioid dependence or abuse), cumulative over the 2017-18 year.</td>
<td>Patrick Curran; Trevor Grace</td>
<td>Bobby Tay</td>
</tr>
<tr>
<td>Otolaryngology Residency</td>
<td>Communication tool for inpatient surgical cases will be utilized in at least 80% of patient care episodes over the 2017-18 year.</td>
<td>Elizabeth Cedars; Sean Alemi; Molly Naunheim; Conor McLaughlin</td>
<td>Patrick Ha</td>
</tr>
<tr>
<td>Pediatric Anesthesia Fellowship</td>
<td>To reduce spending on protective garments (&quot;bunny suits&quot;) for family members in the Children’s Pre-operative areas by 10% cumulative over FY17 (adjusted to 9/15-6/30).</td>
<td>Denise Chang; Masood Memarzadeh</td>
<td>Marla Ferschl; Jina Sinskey</td>
</tr>
<tr>
<td>Pediatric Cardiology Fellowship</td>
<td>Fellows will achieve 75% compliance with the Post Catheterization Vascular Occlusion Protocol, cumulative over the 2017-18 year.</td>
<td>Tatemar Hassan; Amyr Hsieh; Christiana Tai; Diwakar Turaga; Samuel Keller</td>
<td>Phillip Moore</td>
</tr>
<tr>
<td>Pediatric Critical Care Fellowship</td>
<td>Increase total procedural sedation log completion from 5.5% to 75% completion, cumulative over the 2017-18 year.</td>
<td>Helayne Feerman</td>
<td>Deborah Franzon</td>
</tr>
<tr>
<td>Pediatrics Residency</td>
<td>Increase in the percentage of patients discharged before noon to a target goal of 24%, cumulative over the 2017-18 year.</td>
<td>David Chen; Matthew Nordstrom</td>
<td>Darren Fiore</td>
</tr>
<tr>
<td>Residency/Program</td>
<td>Objective</td>
<td>Individuals</td>
<td>Status</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Plastic Surgery Residency</td>
<td>75% of wound care consult requests will receive initial recommendations within 24 hours, cumulative over the 2017-18 year.</td>
<td>Eric Wang; Daniel Baikin; Michael Holland; Rachel Lentz; Laura Wong; Mary McGrath</td>
<td>Green</td>
</tr>
<tr>
<td>Psychiatry Residency</td>
<td>Increase monthly completion rate of PHQ-9 for adult psychiatry follow-up encounters to greater than 25%, cumulative over the 2017-18 year.</td>
<td>A. Ning Zhou; Elizabeth Rawson; Ellie Elmschig; Josh Carroll; Weston Fisher</td>
<td>Red</td>
</tr>
<tr>
<td>Pulmonary &amp; Critical Care Fellowship</td>
<td>Achieve 75% completion rates for the discharge template, indicating clearly specify in the time-frame needed and prerequisites before follow-up, cumulative over the 2017-18 year.</td>
<td>Lekshmi Santhosh; Alyssa Perez; Bhavika Kaul; Lorri Leard</td>
<td>Red</td>
</tr>
<tr>
<td>Radiation Oncology Residency</td>
<td>Documentation of “plan of care for pain” will be documented in &gt;50% of new patient consultations seen by residents for bone metastases in the department of Radiation Oncology for 3 out of 4 best performing quarters in the 2017-2018 academic year.</td>
<td>Lauren Boreta; Christopher Chapman; Jason Chan; Shannon Fogh</td>
<td>Green</td>
</tr>
<tr>
<td>Radiology and Biomedical Imaging Residency</td>
<td>Ensure that &gt;75% of significant adverse contrast events are documented in the radiology imaging report using a standard reporting template, or in Apex as a note, cumulative over the 2017-18 year</td>
<td>Molly Chapman; Christopher Hess</td>
<td>Green</td>
</tr>
<tr>
<td>Reproductive Endocrinology and Infertility Fellowship</td>
<td>Achieve a 50% reduction in delayed preoperative H&amp;P completion to improve clinic efficiency, cumulative over the 2017-18 year.</td>
<td>Amanda Adeleye; Heather Huddleston</td>
<td>Green</td>
</tr>
<tr>
<td>Urology Residency</td>
<td>75% resident compliance in ordering the “MD Delirium orderset” either in the post-operative order set or within 6 hours of admission, cumulative Oct 1-June 30.</td>
<td>Bogdana Schmidt; Max Meng</td>
<td>Green</td>
</tr>
</tbody>
</table>
**Goals of Care Documentation in Inpatient Palliative Care Consultations**

**Background**

- In June 2017, a baseline analysis of a sample of 20 patients seen by the Palliative Care Service (PCS) over prior 4 months revealed that 55% were seen for goals of care (GOC) discussions.
- Among patients seen for GOC:
  - 63.3% had goals documented anywhere in the chart by PCS (e.g., in the note or in the problem list).
  - Only 54.5% had documentation of overall goals of care (e.g., curative, comfort focused) and at least one specific treatment preference (e.g., code status, dialysis).

**Project Goals**

**Primary Outcome**

Among palliative care consultations "Advance Care Planning/Goals of Care," who are discharged from UCSF Medical Center at Parnassus between September 1, 2017 and May 31, 2018, HPM fellows will increase the overall percentage of patients with documentation of GOC and treatment preferences, or an attempt to discuss these topics, in the palliative care consult note from 54% to 80%.

**Secondary Outcome**

Among palliative care consultations for "Advance Care Planning/Goals of Care" above, HPM fellows will increase the overall percentage of patients with documentation of GOC and treatment preferences in the permanent problem list ("Overview").

**Project Plan and Intervention**

- The team created a dot phrase (below) to encourage consistent, succinct, and time-saving documentation of GOC and at least one treatment preference.
- The project and dot phrase were introduced at monthly palliative care meetings and through monthly emails to the division to encourage dot phrase use.

**Project Evaluation & Impact**

**Example Month: February 2018**

- **Primary Outcome:**
  - 100%* goal met
- **Secondary Outcome:**
  - 95.8%* goal met

- Audit: 78 seen by PCS MD
- Consult for GOC: 48
- GOC & at least 1 TP in A/P: 48
- Overview with .PCSACP: 46

**Key Results:**

- Surpassed primary goal of > 80% documentation of GOC and 1+ treatment preference in each month
- Implementation of dot phrase to centralize and summarize GOC and treatment preferences increased overall GOC documentation rates

**Next Steps, Dissemination & Lessons Learned**

**Next Steps:**
1. Improve orientation materials on the ACP dot phrase for residents and fellows rotating on PCS
2. Investigate ways to automatize the use of the ACP dot phrase
3. Incorporate overview of the ACP problem on problem list into ACP Navigator

**Dissemination:**
1. Submission to the American Academy of Hospice and Palliative Medicine national conference for presentation in Spring 2019
2. Collaborate with non-PCS services at UCSF the ACP dot phrase for improved standardization of GOC documentation

**Lessons Learned:**
1. MD-focused intervention undervalues work and documentation of PCS team members of other disciplines who lack access to problem list
Outcome
- % of patients who received NDNMBDs treated according to evidence-based guidelines:
  - Spontaneous neuromuscular recovery with quantitative TOF ratio ≥ 0.9 prior to extubation
  - Reversal agent administered prior to extubation
  - Patient remained intubated

Inclusion criteria
- Patients ≥ 18 years of age
- Patients who received NDNMBDs

Exclusion criteria
- Patients < 18 years of age
- Patients with a medical contraindication to reversal or where reversal was clinically inappropriate

Interventions
- Departmental education on evidence-based guidelines for monitoring and reversal of NDNMBDs
  - Quarterly presentations at Grand Rounds with performance updates
  - Email reminders with educational materials
  - Reminder pages to anesthesia residents
  - Reference cards on anesthesia carts in operating rooms
- Acquisition of additional quantitative neuromuscular monitors (STIMPOD and E-NMT)

Goal:
Increase resident adherence to evidence-based guidelines on preventing residual neuromuscular blockade by 10%
- 2016 Resident Baseline: 74.6%
- Resident Goal: 74.6% x 110% = 82.1%
- Cumulative rate from July 2017 – June 2018: 82.1%

Next Steps:
- Compare pre and post survey results on provider knowledge and practices regarding monitoring & reversal
- Correlate reversal/no reversal with PACU length of stay
- Correlate reversal/no reversal with PACU desaturation events and supplemental O2 requirement
- Evaluate cost effectiveness of monitoring & reversal with respect to drug usage and OR time utilization

Dissemination:
- Encourage same practice guidelines in ICU and pediatric populations when using NDNMBDs
- Present QI project and results at national conferences to help spread best practices

Lessons Learned:
- Provider education on evidence-based guidelines is key to changing clinical practice and achieving sustained compliance
- Launching a successful project and retaining buy-in required the coordinated efforts of a multi-disciplinary team, which included administration, faculty, CRNAs, residents, anesthesia techs, and IT support.
Smoking Cessation Screening & Education in the Cardiac Cath Lab

Team: Cardiology
Lead Fellows:
Blake Charlton, MD
Jeremy Tietjens, MD
Faculty Mentor:
Krishan Soni, MD

Background

- Tobacco use contributes to the global burden of cardiovascular disease.
  - Prevalence of smoking among Californian Adults was 11.6% in 2014 according to the Behavioral Risk Factor Surveillance System, 1986-2014.
- Therefore, reduction of smoking rates are an important aim at both the public health and individual level.
- Systematic screening of patients for tobacco use and provision of counseling and cessation resources for active smokers have been shown to reduce the use of tobacco products.
- UCSF has prioritized tobacco cessation by implementing systematic screening and cessation counseling for all patients.
- Outpatients referred for coronary angiography have significantly higher baseline cardiovascular risk as compared with the general population and therefore would particularly benefit from tobacco screening.
  - However, these patients are not systematically screened for active tobacco use and are rarely offered cessation counseling.

Project Plan and Intervention(s)

- Integrate tobacco screening & counseling into the daily cath lab workflow.
  - Fellows educated about importance of screening & counseling.
  - Identified tobacco cessation as a departmental priority.
  - Document current tobacco use status into pre-procedure H&P.
  - Aid provider compliance by providing reminder for tobacco use.
  - Provide a reliable mechanism for measuring provider compliance.
- Create standardized tobacco cessation materials to provide smokers.
  - Ensure that all tobacco users are provided with high quality information about cessation resources (picture right).
  - Standardizing resources is also optimally efficient from workflow perspective.

Project Goals

Goal #1: Screen at least 80% of adult outpatients referred to the UCSF cardiac catheterization lab for coronary angiography for active tobacco use.

Goal #2: Provide at least 80% of patients who self-identify as active tobacco users with brief counseling as to the importance of smoking cessation and printed resources for further assistance with cessation.

Next Steps:

- Our immediate next step will be to collect and integrate data from the 4th quarter to ensure our screening and counseling rates remain high. Given the low prevalence of active smokers in our target patient population, the crucial next steps will be to determine whether the unexpectedly low number of active smokers to whom counseling was delivered justifies the provider-level workload necessary to continue carrying out the project in future years.

Dissemination:

- All outpatient procedures performed at UCSF Medical Center require a pre-procedure H&P; and thus dissemination to other departments and settings could be performed in a relatively straightforward fashion by adapting our SmartPhrase to the respective H&P template.

Lessons Learned:

- The most unexpected aspect of our project thus far was the surprisingly low prevalence of active smokers in our target patient cohort. Potential explanations for this include inaccurate reporting/data collection and/or a real discrepancy between our expected and real-world smoking prevalence. We performed two quality control checks by independently reviewing individual Apex charts during a given month to verify current smoking status using documentation outside the cath lab visit. We found no cases during the two months reviewed in which current smoking was documented in Apex outside the pre-cath H&P. Plausible explanations for a smoking prevalence lower than projected include possible referral bias — outpatients patients referred to our cath lab may be less likely to be active smokers than would be expected based on data published by the Department of Health pertaining to California smoking rates (11.6% in 2014). Additionally, we observed a very high proportion of patients who had been referred for angiography as a component of evaluation for solid-organ transplantation. While we did not formally collect data on this in order to precisely quantify, our estimate is that roughly 1/3 of patients in our target cohort met this criteria. The true smoking prevalence in this subgroup would undoubtedly be 0% as active smoking would preclude transplant candidacy.

Next Steps, Dissemination & Lessons Learned

As shown in the bar graph to the left, our group was successful in meeting the project’s prespecified improvement targets. Specifically, we achieved a 98.6% rate of screening outpatients for current smoking and a 92% rate of providing smoking cessation counseling to those patients who screened positive for active smoking — both of which were greater than the 80% target rate for both objectives.

While our group achieved both project goals, our data revealed a surprisingly low prevalence of active smoking in our target patient population. Of 442 patients screened, just 3.2% self-identified as active smokers. Therefore despite high rates of both screening and counseling, a net total of just 13 active smokers received counseling throughout the first 3 quarters of the year.
Acne Wisely
Reducing unnecessary laboratory costs for isotretinoin

Jason Meyer, MD, PhD
Timothy Schmidt, MD, PhD
Department of Dermatology

Background

Laboratory monitoring is expensive!

True North Pillar: Financial Strength (Lower our costs)

Isotretinoin lab abnormalities: typically mild

Serious adverse effects are very rare (case reports only for pancreatitis, hepatitis, agranulocytosis)

Project Plan and Intervention(s)

Root causes and barriers to appropriate laboratory testing:
Non-evidence based recommendations (e.g., package inserts)
Uncertainty and lack of evidence, education on the topic
Habit, custom or institutional teaching
Fear of litigation, defensive medicine
Patient concerns

Intervention: short lecture presentation with discussion
Live presentations may have a greater impact on retention and behavior than other modalities
Comprehensive literature review performed to strengthen evidence basis
Meetings and consultation with department faculty

Supplementary Intervention: APEx dot phrase for progress notes
Reminder of monitoring recommendations while saving time documenting
Presented during lecture

Alternative interventions considered: handout, email reminders, APEx tools

Project Goals

Routine acne patients
No risk factors, normal baseline labs

Recommended tests
Baseline: Fasting lipid panel + ALT
1 or 2 months: Triglycerides + ALT

Unnecessary testing (definition):
Any testing beyond the above

Goal: Reduce unnecessary laboratory costs by 25%

Unnecessary laboratory costs

Cost reductions of at least 76% sustained through Q1 – Q3
Certain individual providers were over-represented in excess testing
Random surveys: Recommendations were forgotten

Next Steps, Dissemination & Lessons Learned

Next Steps:
Systematize reminders (by email, grand round announcements) to maintain cost reductions
Extend the project to monitoring for other retinoids (acitretin, bexarotene)

Dissemination:
Literature review and educational lecture to reduce cost of monitoring for other medications

Lessons learned:
Literature review is important in evaluating the rationale for laboratory monitoring
Educational interventions can be very effective in reducing laboratory costs
Reminders are important to maintain good practices
Language specific discharge instructions

UCSF Resident and Clinical Fellow Quality Improvement Incentive Program
in partnership with the 2018 UCSF Health Improvement Symposium

Jessica Paz, Julia Chang, Cortlyn Brown
Mentors: Jacqueline Nemer, Steve Polevoi
UCSF Department of Emergency Medicine

Background

Discharge instructions (DCI) are an essential component of all emergency department (ED) visits. Written discharge instructions allow patients to understand what happened in the ED, the next steps that need to be taken for their health (follow up plan, medications, etc.), and the concerning symptoms to prompt a return visit.

8% of UCSF ED patients report that English is not their primary language, yet at the beginning of our QI period, nearly all DCI were given in English.

Studies show that DCIs written in patients’ preferred language lead to better compliance and satisfaction.

Project Plan and Intervention(s)

- Residents developed discharge instructions for the 6 most common ED chief complaints in Spanish, Chinese, and Russian (the three most common non-English languages in our patient population).
- DCI were vetted by the UCSF Patient Education Committee, then translated by certified UCSF Medical Translation Services.
- DCI were imported into Apex as dolphrases for use by MDs, AHPs.
- Performed mid year evaluations for barrier to use of DCI dolphrases and incorporated visual alerts on computers, email reminder

FISHBONE: Root Cause Analysis

- Patients are not getting DCI in their preferred language
- Limited availability to make reports
- Limited language available to work efficiently
- None of patients notified of their DCI
- Residents are not aware of the DCI
- Many visiting relatives not aware of DCI
- Presence of DCI in 3 languages
- Not able to use google translate for other languages
- Limited resources available
- Limited language available
- Limited availability to make reports

Project Evaluation & Impact (First Quarter)

<table>
<thead>
<tr>
<th>Language</th>
<th>Discharge instructions that used language specific DCI</th>
<th>Total N of patients who list this as their primary language</th>
<th>Percentage of language specific DCI used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russian</td>
<td>2</td>
<td>55</td>
<td>3.6%</td>
</tr>
<tr>
<td>Chinese</td>
<td>37</td>
<td>249</td>
<td>14.9%</td>
</tr>
<tr>
<td>Spanish</td>
<td>5</td>
<td>572</td>
<td>1.9%</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>572</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

Breakdown of top language specific DCI used - chief complaint/language

<table>
<thead>
<tr>
<th>Breakdown of top language specific DCI used - chief complaint/language</th>
<th>Russian</th>
<th>Chinese</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACK PAIN - Russian</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LACERATION - Chinese</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>SHORTNESS OF BREATH - Chinese</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BACK PAIN - Chinese</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABDOMINAL PAIN - Spanish</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEST PAIN - Chinese</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEADACHE - Chinese</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABDOMINAL PAIN - Chinese</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department visit - Chinese</td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Next Steps, Dissemination & Lessons Learned

Primary outcome:
Increase the percentage of patients who receive language-specific discharge instructions by 30% among patients with non-English preference.

Numerator = # visits by non-English preferring patients.

Denominator = # visits by non-English preferring patients.

Secondary outcome:
Increase the understanding of DCI during callbacks for emergency department visits.

Table 1. Percentage of non-English speaking patients in Q1 that received language specific DCI

Table 2. Frequency of chief complaint DCIs utilized

Challenges:
- With unexpected upgrade of EPIC (UCSF Apex), we were unable to continue to track our data by searching for the use of the dolphrases beyond Q1.
- Some users were unaware that the dolphrases existed and others would have liked more chief complaints.

Next Steps:
Encourage residents to continue to use the discharge instructions and develop process in EPIC to track use.

Possibilities to increase awareness:
- Embedding champion like charge nurses or senior residents who can audit and educate in real time.
- Consider using an EPIC notification that the patient might need language specific discharge information.

Dissemination:
These DCIs will be accessible to all providers using UCSF Apex since these DCIs will be beneficial to other specialties, particularly primary care as there is significant overlap between the ED and primary care chief complaints.

Special Thanks
Dr. Susan Rosendahl, Axios Stanley, and the UCSF Patient Care Fund for their generous support, Tobias Schmichinger for technical support, and the UCSF Patient Education Materials Committee for their time and input.