**Supplementary Table 1.** Mapping of lessons learned to systems-based practice milestones.

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| Milestone | Definition | Sample quotations |
| SBP-A1 | Understand unique roles and services provided by local health care delivery systems | *Physical therapy had recommended either a subacute rehab facility or outpatient rehab with 24-hour home health services, as the patient was unable to ambulate without assistance due to edematous lower extremities and generalized weakness. The patient and her husband, however, were anxious to get her back to an alcoholism rehab facility, so that she would qualify for liver transplant. The difficulty with the latter plan, was that given her altered, albeit improved, mental status, she wouldn't be able to participate fully in a rehab program for alcoholism and those programs wouldn't provide the physical therapy that she would need to become independent and take care of herself. Ultimately, it was decided to discharge her to subacute rehab, as the patient didn't want to "burden" her husband with home health services or having to help take care of her.* |
| SBP-A2 | Manage and coordinate care and care transitions across multiple delivery systems, including ambulatory, subacute, acute, rehabilitation and skilled nursing | *It was crucial that she have plans in place for immediate follow-up and continuation of the treatment for acquired Hemophilia A she had begun during admission. Her PCP identified a local hematologist associated with a chemotherapy infusion center and we were able to set up an appointment for the patient to receive her Rituximab infusions. She had also been diagnosed with atrial fibrillation/flutter during this admission and had been started on new medications. She had not seen a cardiologist in about 7 years, so it was important for us to reestablish care for her with her former cardiologist and set up an appointment with him soon after discharge so that someone would be managing her cardiac medication regimen and monitoring her condition. This patient also had a long relationship with her PCP, who needed to be informed of her hospital course, and an appointment with him was set. In addition to providing the patient with discharge paperwork, we arranged to have all relevant materials from the outside hospital and from this admission sent to the hematologist, cardiologist, and primary care doctor.* |
| SBP-A3 | Negotiate patient-centered care among multiple care providers | *Perhaps the most significant issue related to Mr. X’s discharge was the plan to have him set up with home milrinone. There were multiple barriers related to this. The first was that the patient and his family did not want the milrinone drip, due to complications of over-diuresis and worsening dyspnea in the past. However, Mr. X's disease had progressed to point where the only interventions that could improve his symptoms are all advanced therapies, with the milrinone drip being the least aggressive of all of them (mitral E-clip, LVAD, heart transplant). If discharged without a milrinone drip and carefully titrated medications, he would not have gone home with much symptomatic relief. After I had several long, and ultimately rewarding discussions with Mr. X and his daughter that detailed the reasoning behind each management decision and why his team believes a milrinone drip would be helpful, the patient and his family consented to the treatment.* |
| SBP-B1 | Appreciate roles of a variety of health care providers, including but not limited to consultants, therapists, nurses, home care workers, pharmacists and social workers | *The only issue I had with discharge planning was the patient's desire to speak to his psychiatrist about his "recreational" drug use. We informed him that his drug use could have contributed to his recent admission and that he should discontinue these habits before they become larger problems. The patient expressed understanding and was accepting to our talk and with social works recommendations, it is just up to the patient to truly want to change. In hindsight, I should have asked the patient if I could call his psychiatrist to discuss his drug use to know that they will be aware of the issue at his next appointment.* |
| SBP-B2 | Work effectively as a member within the interprofessional team to ensure safe patient care | *The nurse service that would go to Mr. R's home to instruct him how to administer his medications through the PICC, instructed us that the patient must be discharged prior to 3 pm so they could have the instruction session by 5 pm at the latest. However, we still awaited the result of the gentamicin trough level in the afternoon. We expected the trough level to be non-toxic given the patient's weight and the dose that was administered but could not be certain. We had to decide whether to (1) discharge him and hope that his gent level was in the proper range or (2) hold him for an additional day so that we could get his gentamicin level and send him home in time for the nursing service to have their session at his home. Ultimately we decided that it was safest to have him stay an extra day in the hospital, as it would be a major issue if his gentamicin trough level were not in therapeutic range and he would need to be seen immediately to determine the proper dosage.* |
| SBP-B3 | Consider alternative solutions provided by other teammates | *The OT felt that, off the record, the patient could probably manage to make it back to Virginia, fill her prescriptions, and continue to live as she had been living with the help of her daughter. However, the team and the OT were very uncomfortable with discharging her knowing her cognitive impairment, so we consulted the patient's PMD for guidance. He immediately suggested she may benefit from placement at a skilled nursing facility in order to be seen more frequently at GI and HIV clinics and to finally start Hepatitis C direct antiviral treatment. The patient was very reluctant to go along with this plan, but her PMD managed to convince her to try.* |
| SBP-B4 | Demonstrate how to manage the team by utilizing the skills and coordinating the activities of interprofessional team members | *He revealed to me that he had no PMD because he had only recently received insurance. I encouraged him to find a doctor in his area. He was not sure how much longer he would receive insurance benefits now that he was unemployed. He could no longer work in magnetic fields with his ICD, which his job required. I assured him that I would contact our social worker on his behalf, but I was not sure how it worked now that he was already discharged. It seemed that he had applied for disability benefits with the help of our social worker, but I had not heard anything about it.* |
| SBP-C1 | Recognize health system forces that increase the risk for error including barriers to optimal care | *The patient had care with doctors who were part of two separate medical systems. The patient's outpatient nephrology follow-ups were with Baylor and his transplant and hospital team were at Methodist. Obtaining his outpatient records was more problematic than expected due to problems surrounding proper HIPAA release documents from the outpatient office. As a result, recent test results were delayed and trying to determine the extent of AKI was delayed as well.* |
| SBP-C2 | Identify, reflect on, and learn from critical incidents such as near misses and preventable medical errors | *While impressed by his efficiency, one other issue that I identified was that the cardiologist had already altered our outpatient anticoagulation regimen and switched the patient to rivaroxaban 60mg daily, as the patient's INR was found to still be sub-therapeutic. I explained to the patient that his cardiologist knows him best and he should continue to follow the outpatient regimen while routinely following up with his cardiologist. However, I also wondered about any patient confusion or adverse events that might result when outpatient physicians immediately alter the course set by an inpatient team.* |
| SBP-C3 | Dialogue with care team members to identify risk for and prevention of medical error | *Pulmonology, interventional radiology, radiation oncology, along with her oncologist and the primary team were caring for the patient. At times, some decisions were made by the specialists without notifying the primary team. For instance, the primary team had not been notified when the patient's possible stent and SVC placement with JR was cancelled and replaced with radiation therapy instead. The patient was maintained on NPO and the primary team was at times unable to communicate the plans to the patient. The communication was improved via persistent phone calls to the specialists although the patients discharge was delayed due to planned and cancelled procedures as well as different communication with the patient.* |
| SBP-C5 | Demonstrate ability to understand and engage in a system level qualitative improvement initiative | *I find that we probably did not spend enough time during the discharge process to adequately and clearly explain his medication changes to him. I think that, in the future when I have my own practice, I will make it a priority to have my team and I create a comprehensive table with a list of a patient's medications that easily describes which are new and which are old, what drugs were discontinued, what time of day you should be taking the medication, with or without food, and why you're taking it.* |
| SBP-D1 | Reflect awareness of common socioeconomic barriers that impact patient care | *Another challenge that I encountered in Mr. Y’s care was the fact that no physicians on the team were able to communicate with him. He is an immigrant from Colombia and did not speak conversational English. This was very apparent on rounds when our attending would spend significantly less time seeing him as compared to other patients who spoke English. Moreover, I feel like this barrier ultimately contributed to the confusion at the end of his hospitalization regarding medical insurance. Were he able to speak English, perhaps our social worker would have been more inclined to introduce herself and inquire about his health insurance status.* |
| SBP-E3 | Demonstrate the incorporation of cost-awareness principles into standard clinical judgments and decision-making | *The patient's diabetes medication Victoza was particularly expensive. While his insurance covered most of the cost, the copay was still burdensome, especially when taken into account with all his other daily medications. This was however a discussion I encouraged him to have with his endocrinologist as he was unable to describe why he had been placed on this medication, as opposed to other glucose control medications.* |