The purpose of this project is to build on a review curriculum that runs parallel to the Essential Core (EC) in year one by introducing a spaced education model and improving existing review self-assessments. Data collected from a 2012 Curriculum Ambassador project suggested the need to 1) improve existing activities for review of medical knowledge from previous blocks and 2) create new opportunities for consolidation and review. Survey responses from Essential Core Curriculum Committee (ECCC) course directors corroborated these findings. The spaced education model shows promise as a tool for longitudinal review of content that promotes continual engagement with core concepts and long-term retention of medical knowledge.

Our work on the review curriculum consisted of two parts, the products of which build in opportunities to review and consolidate medical knowledge prior to the Comprehensive Custom Exam (CCE) in Spring of MS1. Part 1) We created two medical knowledge spaced education courses in the Qstream platform, to be piloted with the first year medical students (MS1s) beginning in January 2014. One course covers core pharmacology concepts from the Prologue and Cardiovascular (CV) blocks; the other encompasses cardiovascular medicine and physiology from the Organs CV block. 24 questions for each course were chosen from existing self-assessments and remediation exercises to represent key principles. Discipline experts oversaw refinement of the questions. The delivery of questions to enrolled students will follow the paradigm designed by Kerfoot et al in research on the spaced education method. Part 2) We improved and expanded two integrated case-based self-assessments containing material from Prologue, Organs, and Metabolism and Nutrition (M&N), which will be opened to students during the Endocrine portion of the M&N block in April 2014. These cases are designed to serve as self-directed review, referencing, and linking to material and resources from previous courses.

We consulted with Erin Mathes, MD, who designed a Qstream course for pediatric dermatology residents at UCSF. Dr. Mathes’ insight on her implementation of the platform helped us to tailor our pilot to our objectives for student learning. We presented our project progress to the Curriculum Ambassadors twice during the summer and received constructive feedback. We developed a mini-pilot (comprised of 6 pharmacology questions) for the 2013 Curriculum Ambassadors to test the platform and gained valuable insight from a Qualtrics survey aimed to assess their overall impressions of and experience using Qstream. The MS1 review curriculum was presented to the ECCC during the August monthly meeting and was received with enthusiasm. We are in the process of working to find ways to use the Qstream tool to meet others’ needs at UCSF; our work will be presented at Clinical Core Operations Committee (CCOC) in October. We plan to collect qualitative survey-based feedback on the perceived utility and quality of these new curricular tools. We also intend to address the impact of the spaced education courses on the ability of enrolled students to retain and apply their knowledge using CCE performance as an outcome measure.