

CT Primary Care Payment Reform

Draft Capabilities Skeleton: Specialization in Infectious Disease

This Draft: July 18

Understanding the Need

The Problem:

A survey of infectious disease specialists found approximately 75 percent of them also serve as primary care physicians for their patients with chronic infectious diseases such as HIV and AIDS (Lakshmi, Beekman, Polgreen, Rodriguez, & Alcaide, May 2018). A survey of patients found 59% use their HIV physician as their primary care provider, and 84% would prefer this model (Cheng, Engelage, Grogan, Currier, & Hoffman, October 2014). Still, many patients with HIV and AIDS receive care for these conditions from a primary care provider. This dual role can be attributed to patient choice and convenience as well as access. However, many patients with chronic infectious diseases also have serious co-morbid conditions such as diabetes and primary care guidelines for these patients differ from the general population. As patients with chronic infectious diseases live longer, effectively managing their other chronic conditions becomes increasingly important. Whether patients with chronic infectious diseases receive care from an infectious disease specialist, primary care provider or both, they need up-to-date knowledge of the best treatment course for their chronic infectious disease and evidence-based management of co-morbid conditions that recognize their chronic infectious disease. Further, as patients with complex medical needs, they are likely to benefit from access to diverse care teams, connections to community resources, behavioral health integration and other capabilities likely to be included in the primary care modernization model.

Please go to [survey](#) to rate this capability's impact as high, medium or low on the following criteria:

| |
|-------------------------------|
| Aim |
| Health promotion/prevention |
| Improved quality and outcomes |
| Patient experience |
| Provider satisfaction |
| Lower Cost |

Proven Strategy:

Name:

STRATEGY A: Project Echo to Provide Additional Support to Primary Care Providers Managing Chronic Infectious Diseases

STRATEGY B: Infectious Disease Subspecialists Managing Primary Care Needs

Definition:

STRATEGY A: Project Echo to Provide Additional Training and Support for Primary Care Providers Managing Chronic Infectious Diseases: A program that increases access to specialty treatment in rural and underserved areas by providing front-line clinicians with the knowledge and support they need to manage patients with complex conditions including HIV and AIDS. The program engages clinicians in a continuous learning system and partners them with specialist mentors at an academic medical center or hub.

STRATEGY B: Infectious Disease Subspecialists Managing Primary Care Needs: Physicians board-certified in infectious disease medicine managing the primary care needs of their patients with chronic infectious diseases such as HIV and AIDS.

Intended Outcomes: Provide interested patients with the convenience of a single medical home that offers up-to-date knowledge of the best treatment course for the patient's chronic infectious disease

and evidence-based management of co-morbid conditions that recognize the patient's chronic infectious disease. Through this medical home, offer patients access to diverse care teams, connections to community resources, behavioral health integration and other capabilities likely to be included in the primary care modernization model.

Consumer Needs:

- An approach that connects physical, behavioral and social health needs.
- An environment free of stigma.
- An environment that recognizes cultural needs and differences, particularly those related to sexual orientation, gender identity, race, religion, language.
- Up-to-date knowledge of the best treatment course for the patient's chronic infectious disease and evidence-based management of co-morbid conditions that recognize the patient's chronic infectious disease.

Health Equity Lens: Specifically for HIV and AIDS, racial and gender disparities in virologic suppression persist and have not diminished for women of color (Getter, et al., January 2018). Further, African-Americans with HIV and diabetes are less likely to have dual control of both conditions.

Implementing the Strategy

Example Scenario Showing Complexity of Care Needs: A patient with HIV has a check-up. Physician orders fasting plasma glucose test as HbA1c can underestimate glycemia in HIV-infected patients (Monroe, Glesby, & Brown, February 2015) and testing blood sugar levels ordered as part of the standard of care for patients taking certain anti-viral medications as side effects can include high blood sugar and diabetes. During the exam, the patient notes he has been feeling excessively thirsty, has needed to urinate frequently and has been very tired (U.S. Department of Health and Human Services, October 2017). A treatment course to manage the patient's diabetes is determined recognizing the specific considerations that need to be made given the patient's HIV treatment course. Members of the network's care team link the patient to community resources to support lifestyle changes necessary to manage the new diabetes diagnosis.

HIT Requirements: None required, though access to a common electronic health record would facilitate information sharing across care team members.

Implementation Concerns:

BOTH STRATEGIES: Patient retention is a heightened concern for patients undergoing HIV and AIDS treatment. Any opportunity to maintain consistency in care delivery and connect patients to peers and community resources have been shown to improve patient retention (Higa, Marks, Crepaz, Liau, & Lyles, December 2012).

STRATEGY A: Project Echo to Provide Additional Training and Support for Primary Care Providers Managing Chronic Infectious Diseases:

- The ECHO model is difficult in a fee-for-service environment if it only reimburses for face-to-face visits and results in clinicians spending less time seeing patients and generating revenue.

STRATEGY B: Infectious Disease Subspecialists Managing Primary Care Needs:

- Transitioning primary care functions to specialist physicians will increase prices paid for these services.
- Infectious disease subspecialists are more likely to refer patients to other specialists for co-morbid conditions than primary care providers (Cheng, Engelage, Grogan, Currier, & Hoffman, October 2014).
- Infectious disease subspecialists may not be trained in providing comprehensive primary care.

Impact

| Aim | Summary of Evidence |
|--------------------------------------|--|
| <i>Health promotion/prevention</i> | N/A |
| <i>Improved quality and outcomes</i> | <p><u>STRATEGY A: Project Echo to Provide Additional Training and Support for Primary Care Providers Managing Chronic Infectious Diseases:</u> A study comparing treatment for Hepatitis C infection at the University of New Mexico (UNM) HCV clinic with treatment by primary care clinicians at 21 ECHO sites in rural areas and prisons in New Mexico found patients at the ECHO sites were more likely to have better treatment outcomes and less likely to have a serious adverse event.</p> <p><u>STRATEGY B: Infectious Disease Subspecialists Managing Primary Care Needs: Opposed:</u> A survey of infectious disease physicians found rates of evidence-based primary care screening to be “suboptimal (Lakshmi, Beekman, Polgreen, Rodriguez, & Alcaide, May 2018).” Opposed: Infectious disease specialists were four times more likely to refer patients to other specialists for management of comorbid conditions.</p> |
| <i>Patient experience</i> | Overall, 84% of HIV patients surveyed preferred their HIV provider be their PCP or already use their HIV provider as such (Cheng, Engelage, Grogan, Currier, & Hoffman, October 2014). |
| <i>Provider satisfaction</i> | <p><u>STRATEGY A: Project Echo to Provide Additional Training and Support for Primary Care Providers Managing Chronic Infectious Diseases:</u> Survey data from the New Mexico Echo project showed a significant improvement in provider knowledge, self-efficacy and professional satisfaction through participation (Arora, et al., September 2010).</p> <p><u>STRATEGY B: Infectious Disease Subspecialists Managing Primary Care Needs: Opposed:</u> Though research on provider satisfaction in this area is sparse, a small study of infectious disease specialists reported less comfort managing co-morbid conditions than infectious-disease related conditions (Cheng, Engelage, Grogan, Currier, & Hoffman, October 2014).</p> |

Lower Cost

STRATEGY A: Project Echo to Provide Additional Training and Support for Primary Care Providers Managing Chronic Infectious Diseases: Despite higher costs due to more patients receiving treatment, Project ECHO is a cost-effective way to find and treat patients with HCV infection using the value produced by quality-adjusted life years as a measure of effectiveness (Rattay, Dumont, Heinzow, & Hutton, December 2017).

Please complete the [survey](#) for this capability.

APPENDIX

Learning from Others

Case Study #1: In 2013 Project Extension for Community Healthcare Outcomes (Project ECHO) used teleconferencing between specialists and primary care teams to review patient records in support of developing care plans for patients with hepatitis C (HCV) infection at Community Health Center, Inc. (CHCI) in Connecticut (Khatri et al, 2013). The CHCI ECHO team comprised of two family practice physicians, an advanced practice registered nurse, and a nurse coordinator with HIV and HCV expertise worked with primary care providers at practice sites in CT treating HCV patients. CHCI has expanded this project to provide access to ECHO teams across CT in recent years and continue to integrate infectious disease care into primary care practices.

Results

- At the six-month mark, 12 HCV sessions were conducted during which 63 patients' care plans were reviewed
- Care plans for 48 unique patients with HCV were created by primary care providers in consultation with the CHCI ECHO team
- Each ECHO participant presented a mean of 7 cases, suggesting a need for HCV care capability at the primary care site

Lessons Learned

- Incorporation of Project ECHO into a federally qualified health center with a PCMH model created an easily accessible healthcare delivery platform.
- Project ECHO allowed community health centers to provide specialty resources and benefits to patients at the health center integrating their care and avoiding specialty visits.
- The ECHO model is difficult in a fee-for-service environment if it only reimburses for face-to-face visits and results in clinicians spending less time seeing patients and generating revenue. (Anderson, et al., 2017)

Case Study #2: In 2016 researchers surveyed Emerging Infections Network infectious disease providers from across the U.S. and Canada to understand the extent to which they were screening patients living with HIV for HIV-related issues, primary care screenings, and conducting appropriate vaccinations. In

In addition, the survey assessed institutional, financial, physician, and patient related barriers and recorded screening pattern differences based on geographic location, years of experience since completion of infectious disease training, type of employment setting, and the number of HIV patients cared for by the provider.

Results

- A majority of the 326 infectious disease physicians performing primary care functions reported that they always/mostly (88%-95%, dependent on the test) perform annual primary care screenings including fasting lipids, age appropriate colonoscopies, and annual mammograms, annual cervical PAP smears for women
- About half of the 326 infectious disease physicians performing primary care functions reported that they always/mostly perform annual depression screening (55% of physicians) and osteoporosis screenings for postmenopausal women (57% of physicians)
- Very few of the 326 infectious disease physicians performing primary care functions reported that they always/mostly perform screenings for osteoporosis for men over 50 years of age (33% of physicians)
- Greater variation was seen when these physicians performed vaccinations. Percentages of the 326 infectious disease physicians performing primary care functions performing the following vaccinations always/mostly varied: Zoster (39%), HPV (61%), Tdap (84%), pneumococcal (94-96%, based on strain), and annual influenza vaccinations (99%)
- Most common barriers reported included patient refusal for a screening, other health priorities, inadequate time during clinical visits, and non-adherence to HIV treatment

Lessons Learned

- Providers treating more HIV-infected patients are more likely to act as primary care providers
- More HIV outpatient care provision was associated with higher provision of screening/prevention services
- Recent graduates of medical training programs were more likely to provide primary care services
- Providers in the university hospital setting were more likely to provide screening services than those in other clinic settings (Lakshmi, Beekman, Polgreen, Rodriguez, & Alcaide, May 2018)

Bibliography

- Anderson, D., Zlateva, I., Davis, B., Bifulco, L., Gianotti, T., Coman, E., & Spegman, D. (2017). Improving Pain Care with Project ECHO in Community Health Centers. *Pain Medicine*, 1882-1889.
- Arora, S., Kalishman, S., Thornton, K., Dion, D., Murata, G., Deming, P., . . . Pak, W. (September 2010). Expanding Access to HCV Treatment- Extension for Community Healthcare Outcomes (ECHO) Project: Disruptive Innovation in Specialty Care. *Hepatology*, 1124-1133.
- Cheng, Q. J., Engelage, E. M., Grogan, T. R., Currier, J. S., & Hoffman, R. M. (October 2014). Who Provides Primary Care? An Assessment of HIV Patient and Provider Practices and Preferences. *Journal of AIDS and Clinical Research*, 366.

- Geter, A., Sutton, M. Y., Armon, C., Durham, M. D., Palella Jr, F. J., Hart, R., & Buchacz, K. (January 2018). Trends of racial and ethnic disparities in virologic suppression among women in the HIV Outpatient Study, USA, 2010-2015. *PLOS One*.
- Higa, D., Marks, G., Crepaz, N., Liao, A., & Lyles, C. (December 2012). Interventions to improve retention in HIV primary care: a systematic review of U.S. studies. *Current HIV/AIDS Reports*, 313-325.
- Lakshmi, S., Beekman, S., Polgreen, P., Rodriguez, A., & Alcaide, M. (May 2018). HIV primary care by the infectious disease physician in the United States- extending the continuum of care. *AIDS Care*, 569-577.
- Monroe, A. K., Glesby, M. J., & Brown, T. T. (February 2015). Diagnosing and Managing Diabetes in HIV-Infected Patients: Current Concepts. *Clinical Infectious Diseases*, 453-462.
- Rattay, T., Dumont, I., Heinzow, H., & Hutton, D. (December 2017). Cost-Effectiveness of Access Expansion to Treatment of Hepatitis C Virus Infection Through Primary Care Providers. *Gastroenterology*, 1531-1543.
- U.S. Department of Health and Human Services. (October 2017). *Side Effects of HIV Medicines: HIV and Diabetes*. AIDS Info.