Program history

In early 2013, leaders from the Camden Coalition of Healthcare Providers, Primary Care Progress, and the Association of American Medical Colleges came together to discuss methods of improving interprofessional collaboration in healthcare. They identified a need to equip providers earlier in their careers with the tools to better care for patients with complex health and social needs. The result was Student Hotspotting: an effort to train the next generation of providers to deliver integrated, person-centered care for patients with complex needs. In 2014, AAMC awarded mini-grants to the inaugural ten colleges and universities across the country. The participating schools each formed interdisciplinary teams of five students and engaged one to three patients experiencing patterns of high utilization in their community. Today, the program has grown to include four regional hub schools and more than twenty-five colleges and universities nationally.

Student Hotspotting was founded on the following principles:

1) **Students will learn by doing.** Students participating in the program will learn interprofessional teaming while actively working on an interprofessional team. Students will learn about healthcare hotspotting and patient complexity while working with a patient facing complex challenges. Healthcare hotspotting is the identification and engagement of patients with patterns of extreme healthcare utilization and poor healthcare outcomes. Instead of focusing on any one disease state, providers or students practicing healthcare hotspotting work in interprofessional teams to address their patients’ complex health and social needs, including chronic illness, addiction, and homelessness. Their understanding of hotspotting will not be theoretical: they will practice at the same time they are building their toolkit of knowledge.

2) **Patients experiencing patterns of high utilization are our greatest teachers.** Patients who frequently admit to the hospital or visit emergency departments (EDs) are people for whom a number of complex circumstances have lined up to make them outliers. By engaging with them, learning their day-to-day, what drives them, and their underlying stories, we can better understand gaps that exist in our systems, and create scalable solutions to affect change in patients across the rest of the bell curve.

3) **Deep medical expertise exists within health systems, and is not our program focus.** Students in health professional training programs receive well developed clinical training in the areas of diagnostics, pharmaceuticals, pathophysiology, and evidence-based treatment pathways for their respective disciplines. Our experience has taught us that medical mismanagement is not typically the cause of high rates of hospital or ED admission. Instead, patients with complex health and social needs mirror the larger, systemic issues that healthcare faces as a whole. This includes: limited or absent care coordination, poorly integrated behavioral health and addiction treatment, and lack of attention to social correlates of health. As such, our preceptors reflect competencies in these areas, with the understanding that students have access to highly competent clinicians and faculty in their own systems.
Program overview
The Interprofessional Student Hotspotting Learning Collaborative is an annual six-month program co-hosted by the Camden Coalition’s National Center for Complex Health and Social Needs, the Association of American Medical Colleges (AAMC), Primary Care Progress, National Academies of Practice (NAP), Council on Social Work Education (CSWE), and American Association of Colleges of Nursing (AACN). Students from schools all over the country apply to be student hotspotters every year. The program requires students from various educational professions to form interprofessional teams consisting of 4-6 students. Some examples of professional programs that have previously been represented in Student Hotspotting cohorts are:

Professional programs represented
- Anthropology
- Audiology
- Biomedical science
- Business
- Community health
- Dentistry
- Epidemiology
- Health Administration
- Law
- Medical dietetics
- Medicine
- Nursing
- Occupational & physical therapy
- Optometry
- Pharmacy
- Physician assistant
- Psychology
- Public health
- Social work
- And more…

The Student Hotspotting program provides education and support to teams as they connect with patients, learn about the root causes of high healthcare utilization, and share this learning with their institutions. Teams participate in an online curriculum and in monthly case conferencing, and receive mentoring and a curriculum learning guide.

Student Hotspotting offers mentorship and practical experience for the next generation of healthcare professionals, and is part of the National Center’s efforts to provide training and resources in the growing field of complex care to providers, researchers, administrators, advocates, and more across the country.

The Hotspotting intervention
The idea that drives the Student Hotspotting program is simple: every hospital has patients with complex care needs who struggle to navigate the equally complex system. The patients that experience high utilization typically have medical and social barriers that keep them from getting the quality care they need.

Student Hotspotting alumni universities 2017-2019
- Arizona State University
- Case Western Reserve University
- Cleveland Clinic Lerner College of Medicine
- Cooper Medical School of Rowan University
- Eastern Virginia University
- Emory University
- Geisinger Commonwealth Medical College – Luzerne
- George Washington University
- Georgia State University
- Harvard University
- Johns Hopkins University
- La Salle University
- Rutgers University - School of Nursing
- Southern Illinois University
- Samuel Merritt University
- Thomas Jefferson University
- Uniformed Service University of the Health Sciences
- University of Albany
- University of Arizona
- University of California-Los Angeles
- University of Chicago
- University of Michigan
- University of Montana
- University of North Carolina School of Medicine Charlotte Campus
- University of Pennsylvania
- University of Scranton
- University of Utah
- University of Washington
- Wilkes University
- Yale University
The student teams are from a diverse range of disciplines and professions that will be an asset to their teams and will strengthen their ability to connect with patients. Students will find that success in this program demands motivation to help others, social engagement, strong communication, maturity, flexibility, and empathy. Through accompaniment and observation, students learn about the barriers that medically and socially complex patients face to obtaining high-quality care and maintaining their health. Over time, the Student Hotspotting intervention has been formalized into the following steps:

1. **Identify patients**
   - Partner with area hospitals, insurance companies, primary care practices or their institution’s quality improvement department to access raw patient data.
   - Use guidelines to target and identify 3-5 patients to engage.

2. **Establish relationships**
   - Make first contact with patient while they are in the hospital; establish a relationship and explain the purpose of engaging in intervention.
   - Make plans to visit the patient in their home or other safe space where the patient feels comfortable.
   - Building trust is critical as patients proceed through the intervention.

3. **Create care plan**
   - Help patients uncover the cause of their high utilization of acute healthcare services.

4. **Support & navigate care plan**
   - Student teams guide patients as they navigate the social service system and attend medical appointments.
   - Teams also provide guidance and support as patients learn to take a more active role in their healthcare.

5. **Present patient story**
   - The Student Hotspotting experience culminates in student teams presenting a patient story to a broader audience, including student teams, Hotspotting Hub leadership, faculty and preceptors, community members, leaders from partnering organizations, and more.
**Student Hotspotting Hubs**

In 2017 the program shifted to a hub and spokes design to expand the vision and reach of the Student Hotspotting program. Four institutions, located across the country, were selected to uplift the Student Hotspotting model. Hubs administer the Student Hotspotting program to student teams internal to their institution, as well as independent student teams assigned to their hub. The hubs are responsible for managing the overall operations and communications with team advisors and students for the Student Hotspotting program. This includes communicating the timeline of the program, responding to student inquiries, and keeping in contact with team advisors and student teams to troubleshoot any administrative barriers that students face in working with patients with complex health and social needs.

The four Hotspotting Hubs are: Thomas Jefferson University, Southern Illinois University, University of Utah, and Samuel Merritt University.

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**Curriculum elements**

The Student Hotspotting program is designed to incorporate many avenues for learning and collaboration around working with complexity. Each part of the program depicted below aligns with the overall principles of Student Hotspotting and provides an essential element to the growth and learning for multi-disciplinary students. These core offerings provide the guidance needed to begin engaging patients who do not respond to the typical way in which healthcare is delivered. Each of the Student Hotspotting curriculum elements are described in greater detail in the following pages.
Opening and closing events
The Student Hotspotting program opens and closes with a full day event for all teams within a region hosted by a Student Hotspotting Hub. One of the reasons for bringing multiple teams together is to build a broader Student Hotspotting community among institutions of higher education.

The opening event, or Kick-off Event, focuses on interprofessional teaming, narrative leadership, and introduces students to fundamental content and program operations. Some highlights include the power of authentic healing relationships and how to capture data to share a patient story at the end of the program. The focus on teaming reinforces the finding that working with complex care patients in complex systems requires the expertise of multiple disciplines working together. By building team cohesion at the Kick-Off Event, students will have a foundation to rely upon when difficulties working with patients arises.

The closing event, or Wrap-Up Event, focuses on teams reflecting on the work they have done with patients, as a team, and how they have grown as professionals. Teams spend time crafting their patient stories to share within their institutions and to a broader community. The Wrap-Up Event also focuses on ramping up student advocacy for vulnerable populations, interdisciplinary teaming, and improved primary care. In this way, the Wrap-Up provides the space for students to consider how to take the learning experience with them beyond the end of the program.

Online curriculum
The Student Hotspotting curriculum consists of a library of over 100 pieces of content, mostly made up of 3-8 minute videos, that students can access at any time. The content is specific and targeted and meant to provide additional information to students as they learn by doing. The curriculum does not focus on teaching medical expertise, but concepts such as social correlates, care coordination, and building patient relationships. This content is often missing from health education, but is critical to working with populations with complex health and social needs.

The online curriculum is hosted on a learning management system, arranged by courses, allowing for and suggesting different access points and potential orders. The courses are organized by developmental milestone, or chronologic stages of the student hotspotting intervention. The six courses are as follows:

Student Hotspotting curriculum elements
- Opening and closing events
- Online curriculum
- Case conferences
- Field-building round tables
1. **Introduction to hotspotting**: Overview of healthcare hotspotting and the Camden Coalition of Healthcare Providers

2. **Preparing to provide whole-person care**: The care philosophies, teaming principles, and building of community relationships necessary for working in complex care.

3. **A patient centered approach to engagement**: An introduction to building a relationship and intervention with the patient at the center.

4. **Activating inward awareness for better care**: How to use reflection to build self-awareness and provide better care for your patients.

5. **Working through challenges together**: Learning how to harness empathy to drive continued motivation, even among challenges.

6. **Complex care across the community**: Utilizing the strength of community to sustain long term change.

Within each course, there are lessons that dive deeper into the philosophical and practical ways to engage within teams, communities, and patients. Some examples are as follows:

- **Leadership**: Teaming, self-mastery, engagement
- **Harm reduction**: Strategies and practices to reduce negative outcomes of behavior
- **Motivational interviewing**: Method of engaging intrinsic motivation to change behavior
- **Trauma-informed care**: Knowing, recognizing, and responding to the effects of trauma
- **Safety**: Being protected from risk or injury
- **COACH**: Patient engagement model developed by the Camden Coalition
- **Addiction**: Concepts for working with patients experiencing addiction

The content in the online curriculum is reinforced through monthly case conferencing.

**Case conferencing**

Students reflect monthly on the patients with whom they work in monthly case conferencing sessions with their preceptors. Preceptors are individuals within a hub’s local community that have deep experience in the field of complex care. Their role is to provide mentorship to students as they engage with patients that have complex needs through monthly case conferencing. Preceptors guide students as they build authentic healing relationships with patients, and help build the skills and competencies required to sustainably work in the field of complex care. Preceptors are trained in a reflective supervisory model developed by the Camden Coalition designed for managers to sustainably and compassionately oversee front line folks that engage in innovative models of healthcare delivery. Each team meets with two preceptors per month. Students use a standard script to speak about their current work with a complex patient. This can be found at the end of this document. This is space in which student learning by doing is supported by preceptors that are experienced in working with complex patients navigating complex systems. Three teams share a one-hour call, so student teams also learn from one another and build community with other teams within the hotspotting program. Preceptors help students successfully build resiliency and the capabilities required to sustainably work in the field of complex care. In case conferencing preceptors also refer to mosaic curriculum tiles to help students become unstuck or provide additional information for situations they are experiencing.

**Field-building round tables**

Students participate in two field-building round table discussions to gain a deeper understanding of how broader systems impact health. By connecting with partners in the field of complex care, students have the opportunity to engage with field experts and participate in bidirectional learning as they guide the direction of the conversation through their questions. The format of field-building round table discussions resembles a “flipped webinar” where experts provide a brief didactic overview of their area of expertise, followed by an open Q&A with students. This provides a platform for students to connect experiential learnings with systems-level topics to help them understand the big picture in complex care.
While other curricular elements are focused on direct strategies for patient engagement, the field-building round tables focus on topics that transcend individual experiences and reflect broader issues in healthcare. Examples topics include: addressing issues of health equity, engaging in cross-sector collaboration, and assessing community needs and assets. The result is a student opportunity to continue building nascent field of complex care.

Other curricular elements may be added at the discretion of each regional Hub to help support the learning of the Student Hotspotting curriculum.

Appendix: Case conferencing script
Please use the patient’s initials (rather than name) while filling out this script and while describing the patient during the case conferencing sessions to protect exchange of PHI.

- (Patient initials) is (age range) and (preferred pronouns) interests include (list the patient’s interests/drivers/former occupation, passions, the things the patient likes to do-incorporate the humanness of the patient, holistic approach, what motivates the patient?)
- (Patient initials) is living with Driving Diagnosis (this can be plural medical/social issues that are most prevalent in the life of the patient).
- (Patient initials) has been in our intervention for (how many days patient has been on the panel).
- Their barriers are (list barriers/issues the patient is experiencing).
- Their strengths are (list strengths of the patient).
- What are the patient’s goals/priorities?
- Is the patient at an I do, we do, or you do stage?
- What feelings are coming up for you when working with the patient?
- What roadblocks are you running into with the patient? (behavioral health, pre-contemplative, health literacy, etc.)

About the Interprofessional Student Hotspotting Learning Collaborative

Student Hotspotting is an initiative of the National Center for Complex Health and Social Needs, which is housed at the Camden Coalition of Healthcare Providers.

Student Hotspotting is co-hosted by the Association of American Medical Colleges (AAMC), Primary Care Progress, National Academies of Practice (NAP), Council on Social Work Education, and American Association of Colleges of Nursing.

About the Camden Coalition of Healthcare Providers

We are a multidisciplinary nonprofit working to improve care for people with complex health and social needs in Camden, NJ, and across the country. The Camden Coalition works to advance the field of complex care by implementing person-centered programs and piloting new models that address chronic illness and social barriers to health and wellbeing. Supported by a robust data infrastructure, cross-sector convening, and shared learning, our community-based programs deliver better care to the most vulnerable individuals in Camden and regionally.

Through our National Center for Complex Health and Social Needs (National Center), the Camden Coalition’s local work also informs our goal of building the field of complex care across the country. Launched in 2016, the National Center exists to inspire people to join the complex care community, connect complex care practitioners with each other, and support the field with tools and resources that move the field of complex care forward.

For more information about the Camden Coalition, visit www.camdenhealth.org.