Rochester RHIO's Medical Director, Dr. Tarun Kothari, Facilitates Connectivity

The Rochester RHIO (Regional Health Information Organization) provides health information exchange services to the greater Rochester and Finger Lakes region (13+ counties) in New York State. As the RHIO matured over the past twelve years, community stakeholders provided clinical leadership. The RHIO found tremendous value in adding a staff Medical Director in 2017.

Medical Director ensures the connection

Dr. Tarun Kothari joined the Rochester RHIO on August 1, 2017 as its first Medical Director. He serves as a clinical champion for the RHIO and for quality data and quality reporting. As Medical Director, he leads efforts to identify gaps between health care data currently collected by clinicians and community organizations, and the emerging data needs required for quality reporting. This promotes more effective value-based payment (VBP) reimbursement, payments that are tied to quality of care rather than quantity, and community quality metrics. The Greater Rochester Health Foundation supports his position by a three-year grant.

Dr. Kothari has deep roots in greater Rochester's medical community, where he served as the Chief of Gastroenterology and Endoscopy for Unity Hospital/Rochester Regional Health, co-founded Rochester Gastroenterology Associates, taught residents at Unity Hospital Internal Medicine Residency Program affiliated with University of Rochester Medical School, and currently consults with the Veterans Administration Medical Center in Canandaigua and Rochester. At Unity Health System, his medical peers named him Physician of the Year in 2007 and Unity Hospital named the new, state-of-the-art endoscopy unit after him and his wife in 2012. Known across the region for his patient care innovations, widespread volunteerism and substantial philanthropy, he received the Monroe County Medical Society's highest honor in 2016, the Edward Mott Moore Award.

Dr. Kothari has been highly effective in his job because of his collaborative spirit and his commitment to and knowledge of quality reporting, direct patient care, and clinical leadership. With almost 40 years as a clinician, Dr. Kothari remembers the laborious practice of collecting patient data before the creation of Electronic Health Records (EHR) and recognizes the many benefits and capabilities of exchanging patient health information through the Rochester RHIO.

How was healthcare data exchanged before the creation of Electronic Health Records (EHRs)?

Prior to the use of EHRs, clinicians collected enormous amounts of patient data. They dictated or recorded by hand medical information such as vitals, orders, prescriptions, lab notes, and discharge summaries. This clinical data was stored as paper records at each point of care. If providers needed to share these patient health records, they used exchanges through the postal system or fax. Problems ensuing from this manual data collection included:

- coordination of care between providers was frequently slow and expensive;
- patient outcomes were inconsistent
- duplicative healthcare services (e.g. labs, imaging) were frequent.

Benefits of EHRs

According to HealthIT.gov, "EHRs are real-time, patient-centered records that make information available instantly and securely to authorized users. While an EHR does contain the medical and treatment histories of patients, an EHR system is built to go beyond standard clinical data collected in a provider's office and can be inclusive of a broader view of a patient's care. EHRs can:

- contain a patient's medical history, diagnoses, medications, treatment plans, immunization dates, allergies, radiology images, and laboratory and test results;
- allow access to evidence-based tools that providers can use to make decisions about a patient's care, and
- automate and streamline provider workflow" (https://www.healthit.gov/topic/health-it-basics/benefits-ehrs).

The comprehensive patient information available from EHRs enables providers to make well-informed care decisions quickly, which translates into improving patient care and participation, reducing safety risks, eliminating duplicates, and cutting costs. Interoperability between EHR systems allows for clinical data to be at the right setting, when it is needed most to support quality healthcare delivery.

What is a C-CDA and how does it strengthen data exchange?

The New York State Department of Health (NYSDOH) established a minimum data standard for providers to meet in tracking health factors that fulfill the current federal standards for health data exchange (http://www.nyehealth.org/nyec16/wp-content/uploads/2017/09/Guidance-Document_SHIN-NY-Data-Contribution_Sep2017.pdf) requirements called C-CDA (Consolidated Clinical Document Architecture). The C-CDA standardizes the content and structure for clinical care summaries, and is a key data standard within EHR systems. It is a single standard for communicating summary of care records, enabling the sharing of clinical care information: inpatient-to-outpatient, primary care physician (PCP)-to-specialist, provider-to-patient, and provider-to-ACO. C-CDA also facilitates easier EHR-to-EHR transition of clinical data.

As an experienced clinician and the Medical Director of Rochester RHIO, Dr. Kothari understands the value of complete C-CDA patient care reports available to participating providers. Physicians and their clinical staff can query for these reports through Explore, the Rochester RHIO's clinical query portal. Users simply click "Repository" to access this health care information for consented patients from 13+ counties in New York State. Physicians can then update the care and concerns of patients, schedule follow-ups, and take immediate action on abnormal labs, X-rays, and hospital/urgent care visits. Dr. Kothari notes, "The C-CDA is the most beneficial and advanced feature available at your fingertips under the RHIO patient portal Explore. The way we live today, patients go from one health system to the other, one emergency room to the other, and consult multiple providers in multiple specialties. The Rochester RHIO makes all of that information available in one place. That ultimately helps doctors provide better patient care."

C-CDAs are also parsed into discrete data in the RHIO's data hub to allow for data aggregation and analysis. This data supports quality measures and data analytics. To continue advancing the Statewide Health Information Network for New York[1] (SHIN-NY), the Department of Health has set an objective to expand the benefit of health information exchange by increasing the quantity and quality of data contributed to the SHIN-NY by hospitals and other healthcare providers. In doing so, the network can

better support statewide efforts to improve healthcare quality, coordination and efficiency of patient care, and reduce medical errors, amongst many other benefits.

How does Dr. Kothari facilitate connectivity via C-CDA?

With more than 37 years practicing medicine at Unity Hospital and Rochester General Hospital and serving as a clinical associate professor at the University of Rochester Medical Center until 2005, Dr. Kothari has a wealth of experience at the two largest health systems in the greater Rochester area. He carries respect among his physician peers in the community and thoroughly understands the transformative changes in the way that health care has shifted in reimbursement paradigms from fee-for-service to value-based payment models. He recognizes that clinical quality measures, which assess the following:

- health outcomes
- clinical processes
- patient safety
- efficient use of health care resources (i.e., avoidance of duplicative tests and images, reducing readmission within 30 days of discharge
- care coordination
- patient engagements
- population and public health
- adherence to clinical guidelines

buttress efforts to improve care delivery and patient outcomes. But he also understands that documenting this quality data and reporting can be arduous and repetitive for physicians and their clinical staff. Since physician resistance is one of the primary reasons why changes in the health-care system often fail or are never attempted in the first place, a physician champion like Dr. Kothari is essential. He possesses respect and credibility among his peers, he has demonstrated a firm capacity to lead, and he is motivated to effect change through the RHIO system.

The Rochester RHIO currently serves over 12,500 users, which includes 8,500 clinical providers, 1,375 clinical organizations and 1.4 million patients. As Medical Director, Dr. Kothari listens to and learns from regional clinicians about their challenges in documenting quality measures and outcomes. He oversees and conducts internal investigations into clinical quality data that flows into the health information exchange, particularly C-CDAs. He also supports regional providers and actively participates on community committees and workgroups. He is willing to telephone, email, and meet directly with doctors and medical staff to help them simplify their office workflow and to ensure C-CDA compliance, which will give every medical provider a more complete picture of the patient's health.

Specifically, Dr. Kothari conducts random samplings of incoming C-CDAs for quality each week. Through this work, he has determined that more than 80% of incoming C-CDAs are complete and meet the Common Clinical Data Set put out by the Office of the National Coordinator for Health Information Technology (ONC HIT). That's good news for quality data.

When Dr. Kothari identifies missing data elements, he straightforwardly reaches out to submitting physicians and educates them about quality data and the importance of meeting federal and state guidelines. He is also willing to meet directly with them to educate them about particular data fields in their EHR. After educating physicians about missing data elements, they correct the errors and future

incoming C-CDAs meet quality data standards. He has a 100% conversion rate. Dr. Kothari's approach is a simple, frank strategy that works.

Additional accomplishments by Rochester RHIO's Medical Director

The role of a medical director in a community health information exchange is to support high quality patient care across the community through the use of clinical data. The Rochester RHIO, with a clinical advisory committee established to support and define the role of medical director, has worked closely with Dr. Kothari to ensure that he strengthens both the RHIO and the community; he does so by using his leadership to increase the number of providers contributing patient data to the regional HIE.

In addition to improving the data quality of C-CDAs, Dr. Kothari has identified data elements that are commonly missing or misplaced: race/ethnicity, preferred language, allergies, care plan, and immunization history. These gaps often stem from differences in EHR systems, so Dr. Kothari takes the time to learn about different EHRs and where the Common Clinical Data Set elements are located in each of the vendor systems sending C-CDAs to the Rochester RHIO. If there is a vendor correction needed, Dr. Kothari asks physicians to work with their vendor to correct the issue—and they do.

Dr. Kothari writes a monthly clinician-focused newsletter for the RHIO. The newsletter includes information about new regulations, quality measures, and quality data. He has also educated the Rochester RHIO community outreach team about common clinical data gaps; those team representatives are now able to better educate our community.

Dr. Kothari strongly advocates for the New York State-sponsored grant program called Data Exchange Incentive Program, or DEIP. Incentive dollars are available through this program for qualifying providers, who must commit to sending C-CDAs to Rochester RHIO for at least one year. In little over a year as the Medical Director, Dr. Kothari has helped 77 practices in the community (334 providers) receive more than $900,000 under DEIP grants.

Although Dr. Kothari recognizes the challenges and barriers created by rapid changes in information technology, and by complicated state and federal regulations, he is making an incredible difference with regard to the quality of the data that flows through the Rochester RHIO. As Medical Director, he continues to move the needle by ensuring that the correct data is located in the correct fields. And, vendors initiate calls to correct issues because their clients want to improve their systems.

Dr. Kothari's direct, well-informed and passionate approach to increasing the quantity and quality of clinical data speaks truth to power. He connects directly with physicians and other healthcare professionals in a way that they respect and heed so that the Rochester RHIO can provide a more complete view of patient health to each patient's treating physician and care team. The Rochester RHIO hails Dr. Kothari's collaborative efforts and we are excited for his work to continue.

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[1] SHIN-NY is the State Health Information Network of New York, which is comprised of seven community health information exchanges each of which provides core health information exchange services to geographical regions in the state. The SHIN-NY provides for a state level umbrella of data exchange across regions.