Vietnam (n=42), were conducted to assess their willingness to conduct rapid HIV testing (RHT). The surveys and focus groups measured knowledge of HIV, attitudes towards HIV and HIV testing, and willingness to conduct RHT in dental settings.

**Findings:** Preference for oral (vs. rapid fingerprick and venipuncture) RHT varied (Australia: 51.1%, China: 39.8%, India: 10.9%, and Vietnam FG theme). Willingness to conduct RHT was: Australia: 65.2%, China: 91.2%, India: 79.9%, and Vietnam: 90%. The biggest barriers to RHT implementation included: lack of knowledge of how to administer the RHT (India: 58.1%, Vietnam FG theme), lack of education on RHT’s (Australia: 44.8%, 42.6%: China), possibility of false positive tests (India: 45.9%), lack of medical referral information for those who test positive (India: 57.1%), and counseling patients on reactive/positive results (Australia: 35%, Vietnam FG theme).

**Interpretation:** The majority of respondents across the studies were willing to provide RHT. However, most would need additional training in HIV medicine, including administering tests, giving positive results, organizing linkage to care services, and other important logistical and patient-centered approaches.

**Funding:** Hoc Mai Medical Foundation, Wellcome Trust Research Fellowship.

**Abstract #:** 2.058_NEP

**Opportunities to use and improve data measurement systems in Rwanda**

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**Context/Purpose:** Complications from preterm birth are now the leading cause of death among children under five. Of the 15 million babies born prematurely each year, nearly 1 million die within their first 28 days of life. However, limitations in robust data and measurement suggest that these estimates may be imperfect.

**Methods:** To explore how Rwanda is positioned to explore prematurity from a data standpoint, we undertook a landscape analysis of existing systems and opportunities for enhanced measurement and data use. We conducted stakeholder workshops with representatives from the Ministry of Health and other development partners. These workshops were conducted from February to September 2015.

**Outcomes:** Rwanda has several data sources that can be leveraged to improve measurement of preterm birth-related indicators. First, Rwanda’s Health Management Information System (HMIS) migrated to a new web-based platform in January 2012. The new system is built on the District Health Information System open source software. Over 1000 data managers and M&E staff have been trained to use this system which is accessible through an internet connection. Second, the community health worker (CHW) infrastructure in Rwanda has enabled the use of RapidSMS, an innovative tool that tracks pregnant women, their newborns and children under two years of age. CHWs can send SMS information to a centralized computer which can monitor incoming information about risky cases in real time, and provide a reminder when follow-up care is required. Third, while RapidSMS provides individual-patient level data, SISCOM provides monthly composite reports of community level contacts. By triangulating HMIS, RapidSMS and SISCOM data, we can assess the performance of maternal and preterm birth-related indicators on antenatal services, labor and delivery, obstetrical complications and postnatal care on a monthly basis including built-in alerts throughout the continuum of care.

**Going Forward:** A Maternal Child Health Multi-stakeholders Monitoring Framework has been implemented to improve interoperability of these data systems. This monitoring tool will help track and accelerate achievements of results through routine analysis, and allow us to act on bottlenecks and barriers to program implementation and ensure quality improvement.

**Funding:** None.

**Abstract #:** 2.059_NEP

**An ethnographic study on the dynamic role of family within diabetic communities in Beijing, China**

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**Background:** Diabetes is emerging as a global health problem in China. Management of diabetes extends beyond the individual. This project reveals the narratives of how one person’s disease inevitably affects caretakers and family members of the patient. This study followed members of the Beijing Diabetics Association (BDA) to discover how individuals’ knowledge about their diabetes distributed to and influenced family members. The aim of the project was to address the following: how do patients take charge of their health and inform their families of their conditions? How do family members in turn interpret and use this knowledge to support the patient?

**Methods:** The study was conducted in Beijing, China. Participant observation of BDA events was conducted in public spaces such as conference centers and auditoriums. Interviews and focus groups were conducted at participant homes or locations of the family’s choosing. Participants were male and female adults with type II diabetes and were recruited from the member pool of the BDA. Six families participated in the study. All participants provided informed verbal consent prior to being included in the study. The study received IRB approval (IRB #STU00200635).

**Findings:** Patients took initiative to manage their diabetes for the purpose of being healthy to take care of generations above and below (children and parents). Patients who lived with the disease for many years were likely to influence family members to participate in healthier lifestyle choices. Often, couples or whole families all had diabetes, and participants were eager to share their experiences and information acquired from the BDA to their family members to encourage and educate knowledge about diabetes-management.

**Interpretation:** Multigenerational care is a crucial factor of support for reasons why patients want to take initiative to manage their own disease, as well as prevent disease from occurring to their family members. Traditionally, patients are only seen as those who receive care. However, patients with many years of experience with the disease acquire knowledge that is unique and valuable.
These patients become caretakers and leaders within their social and familial networks.

**Funding:** Provided by the Radulovacki Global Health Research Fellowship.

**Abstract #:** 2.060_NEP

### Tele Radiology services between rural districts and state capital Bangalore, India, a cost effective, sustainable health care project for rural areas

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**Introduction:** There is a significant scarcity of CT scanners and Radiologists in rural districts of India. All road traffic accident cases with clinical suspicion of head injuries need to be transported to state capital, Bangalore, for proper diagnosis and treatment. Most of the times patients without any need of surgical intervention, are also transported un-necessarily, because CT scans and radiological interpretation were not available. Tele Radiology services ensure emergency services.

**Aim:** The impact of Health Care in rural districts after installation of CT scanner and online Tele Radiology services.

**Methods:** This is a retrospective study on impact of Tele Radiology in rural district of Chikamagalur, 150 miles from Bangalore. Whole body Helical CT scanner was installed in the rural district and on line Tele Radiology services were provided by Siddhartha University Bangalore. A comprehensive study of head injury cases referred from the rural center to tertiary Neurosurgery Hospital in Bangalore, from Aug 2006 to Aug 2015 (10 yrs.) is included in the study group. The study is undertaken by SDM Medical College, Sri Siddhartha University, Tumkur.

**Findings:**

<table>
<thead>
<tr>
<th>PatientTransported</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1763</td>
<td>Soft tissue injuries in 65%.</td>
</tr>
<tr>
<td>916</td>
<td>Minor intra/ extra axial bleeds.</td>
</tr>
<tr>
<td>423</td>
<td>Significant intra axial and sub arachnoid bleeds, no surgical indications. However 40% were transported to tertiary care centers on patient request.</td>
</tr>
<tr>
<td>424</td>
<td>All are referred to state capital.</td>
</tr>
</tbody>
</table>

**Interpretation:** Our study shows that, because of timely CT scanning and reporting, it was not necessary to transport 83% of head injury patients. 12% with intracranial bleed were transported immediately and had timely surgical care. 5% with moderate intraparenchymal hemorrhage, without surgical indication, were transported on request. Tele Radiology services between rural districts and state capital is a cost effective health care technological innovation to prevent un-necessary transportation of head injury patients to tertiary care centers.

**Funding:** Sri Siddhartha Academy of Higher Education, Tumkur.

**Abstract #:** 2.061_NEP

### Dietary patterns and obesity in Nepal

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**Background:** About one-fourth of Nepalese adults are estimated to be overweight or obese. No studies have examined the risk factors for obesity, especially pertaining to diet, in Nepal. The present study aimed to identify dietary patterns in a suburban Nepalese community and assess their association with overweight and obesity prevalence.

**Methods:** This cross-sectional study utilized data from the 1,073 adults (18 years or older) participating in the baseline survey of the Dhulikhel Heart Study. We derived major dietary patterns from the dietary intake using a validated food frequency questionnaire by using principal component analysis. Overweight was defined as BMI of 25 kg/m² or higher and obesity was defined as BMI of 30 kg/m² or higher. Weight was measured using an Omron Model HBF-400 scale and recorded to the nearest 0.1 pounds. Height was measured using a standard tape with participants standing against a wall and recorded to the nearest 0.1cm. Statistical analysis was conducted using the generalized estimating equation (GEE) with multivariate logistic regression (with household as cluster) adjusting for age, sex, ethnicity, religion, marital status, income, education, alcohol consumption, smoking, physical activity, and systolic blood pressure.

**Findings:** Four dietary patterns were derived: mixed, fast food, refined grain-rice-alcohol, and solid fats-dairy. The refined grain-rice-alcohol pattern was positively associated with overweight (aOR 1.19, 95% CI: 1.03 – 1.39; p = 0.02) after adjusting for demographic and traditional cardiovascular risk factors. We found a significant interaction between age and the fast food pattern in association with obesity (p = 0.01) and overweight (p = 0.01). In adults of 40 years or older, the fast food pattern was positively associated with obesity controlling for demographic and traditional risk factors (aOR 1.69, 95% CI: 1.19- 2.39; p-value = 0.003).

**Interpretation:** Our results suggest that refined grains-meat-alcohol intake is associated with higher prevalence of overweight, and fast food intake is associated with higher prevalence of obesity in older adults (40 years or above) in suburban Nepalese adults.

**Funding:** None.

**Abstract #:** 2.062_NEP