WCHRI lay summary recommendations

What is a lay summary?
A lay summary is a brief explanation of your research using simple, common language and terms.

Why are lay summaries important?
A lay summary is used to:
- Fulfill grant requirements
- Raise awareness
- Encourage interest

Quick tips

Answer the 5 W’s
- What is your research about? What will the outcome of your research be?
- Who is involved in your research? Who does your research benefit?
- Where was your research conducted? Where can your research be applied?
- Why was your research conducted? Why does your research matter?
- When was your research conducted? When will your research be complete?

Include the “so what” factor
Why is your research important? Why should the reader of the lay summary be interested?

Replace jargon with simple words
Avoid using jargon, scientific and technical terms, and acronyms when a common term will work.

Read aloud to someone who isn’t familiar with your field
Read your summary to your grandmother. If she can understand your research, your lay summary is successful.
Examples

Technical abstract 1

*Used with permission from Dr. Amanda Newton*

Our team will develop and conduct preliminary testing of *Wired!*, an Internet-based cognitive behavioural therapy (CBT) for anxious youth aged 13 to 17 years who have visited the emergency department (ED) for crisis mental health care.

**Rationale**

Anxiety disorders are prevalent in youth, with disorders serious enough to require treatment occurring in at least 8% of children and youth. These disorders, however, are too often undetected and undertreated, and may have a lifelong impact. Anxiety disorders in youth may significantly interfere with interpersonal relationships, academic performance, and daily functioning.

A substantial number of youth seek care in hospital EDs to stabilize acute crises related to anxiety. Our research in Alberta EDs demonstrated that anxiety-based crises are a paramount concern for youth, representing 26% of all children's ED mental health visits in the province. Most anxious youth in our studies received some counselling in the ED and recommendations for follow-up care. Timely access for youth to post-crisis treatment appears to be lacking, however, as the time to receipt of follow-up care was lengthy (median time: 35 days). Additionally, our studies found evidence that return ED visits occurred subsequent to the crisis visit; thus, supporting anxious youth after a crisis has value.

Our team believes that an effective Internet-delivered CBT for anxiety can provide youth with a timely evidence-based intervention after an anxiety-related crisis. CBT is an effective and long-lasting treatment for anxiety and is a well-established treatment for anxiety disorders in youth. Internet-based CBT is a tested and cost-effective approach, ideal for a post-emergency care gap.

**Research Plan**

Year 1 will focus on *Wired!* development, refinement, and pre-testing. We will use recent reviews on Internet-based interventions to guide *Wired!* development and clinical management literature to guide CBT content. Qualitative methodology with convened youth and clinician advisory panels will help to refine *Wired!* content and delivery features. Panel members will be recruited through the National Infant, Child and Youth Mental Health Consortium. The qualitative data produced from these interviews will be summarized and used to refine a *Wired!* prototype. *Wired!* will be pre-tested by youth panel members to assess (a) efficiency, (b) errors, and (c) acceptability.

Years 2 and 3 will consist of a multi-site demonstration trial (Edmonton, AB; Halifax, NS), which will act as a pilot study to assist in planning a larger randomized controlled trial (RCT). Youth aged 13 to 17 years who have been discharged from the ED after mental health care for anxiety will be recruited and randomized to either an intervention group (Internet-based CBT, *Wired!* or a control group (resource website providing information on anxiety, treatments, and resources). In the pilot study, we will: (i) evaluate the amount of change in youth’s anxiety (primary outcome) from pre- to post-intervention, (ii) estimate a sample recruitment and retention rate for the future trial, (iii) accurately estimate the sample size required for the future RCT, (iv) define a minimal clinically important difference (MCID) for the primary outcome measure, (v) measure intervention acceptability, (vi) determine the use of co-interventions during the demonstration trial, and (vii) conduct a preliminary economic analysis.
Anticipated Results and Significance

In too many communities, the resources available for mental health care are vastly outpaced by the need for care. Our research has the potential to improve access to mental health services both within the post-ED crisis context and broadly beyond. Wired! may serve youth well in large centres such as the study sites, but could also provide great value to youth in smaller or remote communities. Local mental health care providers, who often lack specialized training, would also benefit from access to the Wired! resource. Anticipated benefits of our intervention align well with long-standing recommendations for mental health system change.

Lay summary of above technical abstract

Lay title: Internet-based support for anxious youth, after crisis mental health treatment in the emergency department

Sadly, many teens face severe struggles with anxiety and related mental health issues. In fact, by the age of 16, nearly 10% suffer from anxiety serious enough to seek treatment. These disorders can have grave impacts on teens, impacting relationships, school performance and family life and may have lifelong effects if left untreated.

Many youth look to local emergency departments for help when they experience a crisis. Our analysis has shown that many do get counselling as well as a referral for follow-up treatment, but the wait times can be up to 40 days! As a result, many of these youth with anxiety crises make multiple trips to the emergency department for help. We wanted to develop an online treatment that could potentially support them after an emergency visit while waiting for follow-up treatment.

Wired! is our new internet-based tool that can be accessed from anywhere after their emergency visit. Wired! will include information materials and personalized homework geared towards helping youth gain new tools to help them manage their anxiety. Professional therapists will also be available via an online discussion board to provide feedback and support. Wired! will start testing with a pilot program for real patients, followed by a full-scale evaluation of both the usefulness and safety of the tool.

Too often, the need for resources far outpaces the availability, especially when it comes to youth services. We believe that Wired! has the potential to improve mental health services for youth as well as to empower this vulnerable group with important tools to help manage their anxiety in more meaningful and long-lasting ways. Wired! could also provide great value to remote communities where access to emergency care is limited. Even local health care providers without specialized training, may benefit from the Wired! resources and thus be better equipped to serve their clients and patients.

Technical abstract 2

*Used with permission from Dr. Erin Boschee and Dr. Justine Turner*

**Title:** Prediction of esophagal and gastric histology by endoscopic diagnosis during upper endoscopy in pediatric celiac disease.

**Authors:** Erin Boschee, Jason Yap, Justine Turner
Introduction: Celiac disease (CD) is the most common autoimmune enteropathy in children. Recent guidelines suggest that diagnosis may be possible without biopsy in select pediatric patients, but concerns exist over the potential for missing alternate tissue diagnoses. However, the frequency of endoscopic and histological abnormalities in intestinal sites other than duodenum in patients with CD has yet to be specifically studied. The aim of this study was to determine the sensitivity of endoscopic appearance for predicting normal histology at sites other than the duodenum.

Methods: The study retrospectively reviewed endoscopic and biopsy findings in patients diagnosed with CD at Stollery Children's Hospital from 2010-2012. The primary outcome was the diagnostic performance of endoscopic findings in predicting normal histology of the esophagus and stomach. A secondary outcome was the prevalence of other esophageal and gastric diagnoses.

Results: There were 140 patients included in the study (61.4% female, 38.6% male). The mean age at biopsy was 9.1 years, and the mean aTTG was 393.9.

Endoscopic appearance was reported as normal in the esophagus and stomach in 84.8% and 87.7% of patients, respectively. Abnormal endoscopic esophageal diagnoses included eosinophilic esophagitis (5.8%), esophagitis (5.1%), glycogenic acanthosis (1.4%), and non-specific abnormalities (2.9%). In the stomach, endoscopic abnormalities reported included gastritis (6.5%), pancreatic rest (0.7%), and non-specific abnormalities (5.1%). Biopsies were taken from the esophagus and stomach in 54.3% and 77.9% of patients, respectively. Histology was normal in 77.6% of esophageal and 87.2% of stomach specimens. Abnormal esophageal histologic results included eosinophilic esophagitis (10.5%), esophagitis (9.2%), glycogenic acanthosis (1.3%) and other non-specific abnormalities (1.3%). In the stomach, gastritis was reported in 12.8% of specimens.

The sensitivity and specificity of endoscopic diagnosis for predicting normal esophageal histology was 86.2% and 61.1%, respectively. In the stomach, the sensitivity was 88.3% and specificity was 26.7%. The positive predictive value of endoscopic diagnosis for predicting normal histology was 87.7% in the stomach and 88.3% in the stomach.

Conclusions: This study suggests that, in the absence of gross endoscopic abnormalities, routine esophageal and gastric biopsies during upper endoscopy for pediatric CD are not needed. Endoscopic diagnosis is sufficiently sensitive to predict normal histology. This has cost and time saving applications for current clinical practice. Additionally, the prevalence of alternative diagnoses to CD was 22% in the esophagus and 13% in the stomach, suggesting the risk of missing an additional tissue diagnosis with a non-biopsy approach to CD diagnosis is relatively low.

Lay summary of above technical abstract

Celiac disease (CD) is a chronic gastrointestinal disorder, triggered by gluten ingestion (a food protein found in wheat, barley and rye) in susceptible individuals. Currently there are many controversies in the diagnosis of CD in children. We wish to study the best approach to taking biopsies at gastrointestinal endoscopy in order to diagnose CD in children. Endoscopy under anesthesia in children is invasive and expensive; the best approach should minimize the number of biopsies, but still provide accurate diagnosis. The study will involve review of medical charts, including endoscopy and biopsy reports, of pediatric patients seen and diagnosed with CD at the Stollery Children's Hospital from 2010-2012. We believe that it is important to take biopsies only from the small intestine, given a normal appearance everywhere else during the endoscopy. This will save children from having tissue biopsies from multiple parts of the intestine that does not help diagnosis, but does increases the risks and costs. This research
is important to improve the guidelines for diagnosis of CD in children and adolescents at Stollery Children's Hospital.

Questions?

If you have further questions about writing a lay summary, please contact WCHRI communications at: wccomm@ualberta.ca.