31st Annual Resident Scholarship Day
Abstract Book

Department of Academic Family Medicine
College of Medicine
University of Saskatchewan
medicine.usask.ca/family
May 18, 2021

Congratulations to all of you who have contributed to the creation of these new pieces of scholarship in family medicine. This is the 31st Annual Resident Scholarship Day in the Department of Academic Family Medicine. While it is disappointing to not be able to celebrate this work together, I hope that in reviewing the abstracts and participating virtually, you will learn new things and be inspired to ask more questions about how we practice our discipline in all its facets.

We are living in unprecedented times. The COVID-19 Pandemic is not the first of its kind, but it is the first time we have had access to so much information from so many sources so quickly. This gives us incredible power to learn and adapt in ways that have not been present at any other point in history. At the same time, this highlights how critical our skills in evaluating information, our knowledge of and participation in the research process, and our ability to implement, evaluate and adapt new processes are in our efforts to provide the best possible care to patients and communities.

To our graduating second year residents - I wish you all the best in your future careers.

Stay well,

Kathy Lawrence
Provincial Head
Family Medicine
Congratulations on arriving at this stage of your Family Medicine Training.

As a former participant in the Resident Research Day in Saskatchewan, I am well aware of the feelings and emotions associated with completing a resident project. It is highly unfortunate that due to the CoVID-19 pandemic we are unable to come together to celebrate your success. Please know that your contributions to Family Medicine scholarship are greatly appreciated and valued.

The skills of research, scholarship and critical appraisal have never been more important than they are now. The rate of increase in medical information has never been more apparent than during this pandemic. It seems that information was changing almost hourly. Your investment in your project has exposed you to skills that will be critically useful as your career progresses.

It is my hope that as you read this collection of abstracts you are inspired to ask questions and find the answers. For most of us, scholarship does not look like a long list of publications. However, for all of us, as conscientious providers of care, it looks like life long learning, inquiry, and critically appraising the information with which we are presented.

We should all pause and thank those people who have made this moment possible: the Research Division, Faculty Advisors, and Award Sponsors, are only a partial list of the many important contributors. Thank you to all who make this day happen.

I would like to take this opportunity to wish the graduating FMRs all the best in the future and their chosen careers.

Personal regards,

Brian Geller, BSc, MD, MBA, CCFP (EM), FCFP, FRRMS
Program Director
Department of Family Medicine
University of Saskatchewan
May 28, 2021

Colleagues

On this occasion, the 31st Annual Resident Scholarship Day, I want to take this opportunity to recognize the Residents, Faculty Coaches/Supervisors, Faculty, Staff and members of the research teams for:

- all the hard work that has gone into making this possible;
- your commitment; and,
- for the many contributions that you have brought to these learning endeavours.

Since its inception in 1990, we have gathered together once a year to: celebrate our successes; learn about the scholarly questions that have been systematically answered over the past two years; ask and answer questions that will enhance our knowledge and understanding; and, provide feedback (peer-review). The Annual Scholarship Day in the Department of Academic Family Medicine has evolved and grown over the years providing us with the opportunity to celebrate our academic achievements and to plan for the future.

Over the past 31 years, we have come a long way, but we must continue to transform to meet the needs of the people we serve and the Accreditation Standards set by the College of Family Physicians of Canada.

Winston Churchill indicated that, “to improve is to change; to be perfect is to change often”. Viktor E Frankl said that, “when we are no longer able to change a situation - we are challenged to change ourselves.” Mahatma Gandhi stated, “you must be the change you wish to see in the world.” Improving practice provides these opportunities each and every day.

I would also like to recognize the support that we receive from: the Department of Academic Family Medicine; the College of Medicine; and, the University of Saskatchewan.

Due to COVID-19 and the fact that we cannot share a meal or celebrate your work in person, I want to take this opportunity to wish you much success and the very best as you move forward in your chosen vocation.

Yours sincerely,

Vivian R Ramsden, RN, BSN, MS, PhD, MCFP (Hon.)
Professor & Director, Research Division
Department of Academic Family Medicine
ABSTRACT

Background: Family Medicine residents experience high rates of burnout, which can have numerous negative impacts on physician wellness and patient outcomes. Measuring the prevalence of burnout and professional fulfillment among Family Medicine residents at the University of Saskatchewan may inform future interventions to increase resident wellness.

Question(s): Among Family Medicine residents in Saskatchewan during the period of 2019-2020, what is the prevalence of burnout and professional fulfillment?

Methods/Methodology: A secondary analysis was performed using results from an unmatched longitudinal survey which included the Stanford Professional Fulfillment Index. The survey measured professional fulfillment and two dimensions of burnout: work exhaustion and interpersonal disengagement. The inclusion criteria was any Family Medicine resident training in Saskatchewan during the period of 2019-2020 who consented and participated in the survey. The study was approved by the Behavioural Research Ethics Board of the University of Saskatchewan.

Results/Findings: A total of 160 independent responses were collected over five timepoints. The prevalence of burnout among Family Medicine residents in Saskatchewan during the period of 2019-2020 was 48.3%, with first-year residents (R1s) reporting similar rates at 50.7% compared to second-year residents (R2s) at 45.7%. The prevalence of professional fulfillment was 27.6%, with R1s reporting similar rates compared to R2s (25.4% vs. 30%). Burnout was slightly higher among rural residents compared to urban residents (50% vs. 40.5%), and professional fulfillment was slightly lower among rural residents compared to urban residents (23.7% vs. 36.5%).

Discussion: The prevalence of burnout reported (48.3%) is similar to the national average among Family Medicine residents (50.2%); however, this is significantly higher than the average global prevalence (36%). Our results also suggest that residents struggle to attain professional fulfillment throughout their training. When considering future interventions, factors leading to the apparent discrepancy between rural and urban sites should be explored.

Conclusions: Our results suggest that there is a low rate of professional fulfillment and a high rate of burnout among Family Medicine residents in Saskatchewan. The prevalence of burnout is similar to the national average among Family Medicine residents.
References:
Prevalence of and response to intimidation or harassment among Saskatchewan-based Family Medicine Residents

Andre Coleman, FMR II; Kaitlyn Hughes, MD, CCFP; Olivia Reis, MD, CCFP; Adam Clay, MSc; Vivian R. Ramsden, RN, PhD, MCFP (Hon.)

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Harassment is any unwanted physical or verbal behaviours that causes offense or humiliation. Harassment includes unwelcomed jokes or remarks, threats, intimidation or physical contact. Up to 98% of practicing family physicians, and over 75% of resident physicians in Canada experience some form of intimidation, harassment or discrimination (IHD). Despite experiencing negative consequences of IHD such as anxiety, depression and decreased job satisfaction, few residents report experiences of IHD to their supervisors or institution.

Research Questions:
1. What is the prevalence of intimidation and harassment either experienced or witnessed by Saskatchewan family medicine residents?
2. What are the responses of Saskatchewan family medicine residents to incidents of intimidation and harassment?

Methodology: Anonymous, self-administered surveys were emailed to all 110 family medicine residents in Saskatchewan in November 2020. Surveys collected information on participant demographics and experiences with IHD. Participants reported the frequency of witnessed or experiencing IHD on a 5-point Likert scale. Categorical variables were described as frequencies and percentages. The project was reviewed and approved by the Behavioural Research Ethics Board of the University of Saskatchewan.

Results: The response rate was 35% (38/110). Over 90% of participants experienced or witnessed IHD during their training. The most common form of IHD was disrespectful behaviours, and patients were the most common source of IHD. Twenty-nine percent of residents reported abusive incidents to their supervisors, though most residents were aware of institutional policies relating to IHD. One barrier to reporting identified was poor confidence in the institution’s reporting policies.

Discussion: The prevalence of IHD in this study is comparable to existing literature using similar definitions for IHD. Patients and their relatives being the main source of IHD was consistent with existing literature. Under-reporting of IHD may be due to the source of IHD, as victims may show a reduced stress response if their abuser does not work in their organization.

Conclusions: The majority of Saskatchewan family medicine residents experience and witness IHD, but few report these incidents to their supervisors or institutions. Future studies will assess...
barriers to reporting incidents of IHD, and the impact on learners.

References:
Factors Related to Recruitment and Retention of Physicians in Rural Northern Saskatchewan

Brayden Sauve, FMR II; Rhonda Bryce, MD, MSc; Jeff Irvine, MD, CCFP

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Rural Saskatchewan healthcare relies on the recruitment and retention of physicians. The difficulty of creating an equitably distributed, sustainable, and well-supported rural physician workforce is not a challenge unique to rural Northern Saskatchewan.

Question(s): What influence recruitment and retention of primary care physicians in remote rural practice?

Methods/Methodology: This rapid review assessed a body of literature relating to rural family physician practice in northern and remote settings. The primary literature search undertaken within the Ovid Medline database searched several forms of the keyword family physician, with further narrowing of results when applying “northern” or “remote” to target remote primary care. Results were limited to English and a time period of 2010 onwards. As all results are within public domain, an Exemption from ethical review was granted by the University of Saskatchewan’s Behavioural Research Ethics Board.

Results/Findings: Within a total of 1004 eligible articles, 59 review and 197 health services articles were prioritized. Among these, multiple factors increasing retention and recruitment were identified, including rural background; exposure to regional, rural, and remote work settings during training; scope of practice; opportunities for international medical graduates; return of service contracts; family opportunities; and community engagement. Disincentives included overwork. Financial incentives did not have a strong ability to mobilize physicians to change practice locations.

Discussion: There are many articles that speak to rural recruitment and retention generally; however, there was no consensus among authors as to which factors were the most influential in their ability to attract and retain physicians within a rural practice. In spite of efforts to focus on any unique requirements of truly remote settings, compared to rural locations relatively close to larger centres, there appears to be minimal literature that specifically evaluates factors pertaining to the retention and recruitment influences of these contexts.

Conclusion: There current body of literature identifies a number of factors relevant for addressing challenges related to creating an equitably distributed, sustainable, and well-supported rural physician workforce. However, there is a paucity of literature related directly to physician recruitment and retention in remote settings and those relevant to Northern Saskatchewan.
References:


Ultrasound Guided Intrauterine Device (IUD) Insertion during Family Medicine Residency Training: A Preliminary Analysis.

Kieran Johnson, FMR II; Dr. Angela Baerwald, MD, PhD, CCFP; Rhonda Bryce, MD, MSc Jason Hosain, MD, CCFP; Tracy Guselle, MD, CCFP; Jillian Farrukh, MD, CCFP
Kevin Ledding, MD, CCFP; Yiwen Liu, FMR I; Tatiana Fras, FMR I

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

Abstract

Background: Intrauterine devices (IUDs) are the most commonly used method of reversible contraception. In addition to the ability to prevent pregnancy, they are used to manage heavy and painful menstrual bleeding.1 Ultrasound (US) guided IUD placement has been shown to reduce patient pain scores and procedure completion time versus traditional non-guided IUD placement by practicing physicians.2,3

Question(s): 1) Does transabdominal/transvaginal US versus non-US guided IUD placement improve patient pain scores when conducted in a family medicine training environment? 2) Will the confidence level of resident trainees in performing IUD placement be improved with ultrasound versus non-ultrasound guided IUD placement.

Methods/Methodology: A randomized controlled study was conducted in the Department of Academic Family Medicine, West Winds Primary Health Center (WWPHC) in Saskatoon, Saskatchewan, Canada. Female patients of childbearing age planning a hormonal or non-hormonal IUD insertion procedure and Resident Trainees in Family Medicine at WWPHC were eligible to participate. Patients were randomized to undergo either traditional non-guided (control group) or US-guided (experimental group) IUD insertion. Women self-administered 200 mg ibuprofen 60 minutes pre-appointment. The primary outcome was patient pain score at 3 pre-defined time points. Secondary outcome was resident confidence pre and post-procedure. Outcomes were compared between groups using student t-testing. The University of Saskatchewan Biomedical Ethics Research Board approved this study: Bio#2006.

Results/Findings: A total of 9 participants were recruited (control group: n= 5; experimental group: n=4). Patient pain scores at all three time points were not statistically different between groups (p>0.05). However, a trend was seen for less pain in women with US-guided versus non-guided IUD insertion. No differences in resident confidence levels were statistically detected between US and non-guided IUD insertion; however, a trend for greater confidence with US-guided insertions was observed.

Discussion: Preliminary data collection suggests that US-guided IUD insertion may decrease pain associated with IUD insertion in a resident training environment. Resident confidence levels appear to increase following US-guided IUD insertion.

Conclusions: Preliminary data suggest that US-guided IUD insertion may improve patient pain scores and confidence of family medicine residents to perform IUD insertions; continued research is required.
References:
Evaluation of the Obstetrical Curriculum and Procedural Volumes in the University of Saskatchewan’s Family Medicine Residency Program

Sarah Tsoi, FMR II; Robert Haver, BSc, MD, CCFP
Brian Geller, BSc, MD, MBA, CCFP, FCFP, FRRMS; Adam Clay, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Literature suggests that volume of deliveries in family medicine residency is predictive of who will practice obstetrics after graduation. A study by Taylor and Hansen identified “essential characteristics” of family medicine programs that produced a high percentage of graduates choosing to provide maternity care.

Research Question(s):
1. Do the volumes of obstetrical procedures performed by family medicine residents at the University of Saskatchewan differ over time, site or resident intent to practice obstetrics after graduation?
2. How do residents rate the obstetric curriculum based on Taylor and Hansen’s “essential characteristics”? Is rating influence by resident demographic or training site?

Methods/Methodology: A secondary data analysis of obstetrical procedures reported in the Family Medicine Procedure Log Electronic Database since 2017 was performed. A survey was distributed to active family medicine residents. Questions included demographics, exposure to obstetrics, intent to practice intrapartum care, and the rating of Taylor and Hansen’s “essential characteristic” on a 5-point Likert scale. An Exemption was obtained from the University of Saskatchewan’s Biomedical Research Board.

Results: Procedural volumes have remained consistent throughout the last 5 years and are not affected by training site. There was a statistically significant relationship between number of obstetric deliveries performed and intention to provide intrapartum care. 39.1% residents plan to practice obstetrics. Resident ratings of the “essential characteristics” of obstetrical curriculum differed based on training site and medical school location, specifically regarding obstetric faculty, hospital environment, and family medicine curriculum.

Discussion: For successful obstetrical training in family medicine residency, there is a need to consider procedural volume, continued relationships with our obstetric colleagues, a supportive hospital environment, and family medicine curriculum that supports longitudinal learning experiences.

Conclusions: Family medicine residents should be supported and encouraged to obtain adequate volumes of obstetrical procedures and longitudinal learning experiences.
**Recommendations:** Programs should consider the use of obstetric-based simulations and provision of funding for the ALARM course to support best evidence-based practices. Residents with interest in obstetrics should be given learning opportunities in rural locations, and residents wishing to increase their volume of deliveries should be encouraged and supported to do so in tertiary centers.

**References:**


Does the use of Ballistic Models to teach Family Medicine Residents the Vandenbos Procedure enhance confidence in this skill?

Kara Jodouin, FMR II; Jessica Littmann, PGY2; Jill Farrukh, MD, CCFP; Rhonda Bryce, MD, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Onychocryptosis represents 20% of all foot problems presenting to primary care. The Vandenbos procedure is a surgical treatment that can be offered by family physicians. A realistic model used in teaching the Vandenbos procedure could increase resident confidence in its performance.

Question: Does a teaching session incorporating realistic ballistic models improve the confidence of Family Medicine residents in performing the Vandenbos procedure?

Methods: Upon receiving an Exemption from the University of Saskatchewan Research Ethics Board, realistic ballistic gel toe models were created and incorporated into a routine educational session. Before the session, residents provided their procedural experience, Vandenbos familiarity/use, and opinions regarding model-based learning using 5-point Likert-type questionnaire. Following didactic instruction, residents practiced the excision on the models and then completed follow-up surveys regarding procedural confidence and learning satisfaction. Basic descriptive statistics were undertaken, as well as a comparison of paired pre-post responses using the sign test.

Results/Findings: Fourteen residents in the urban Saskatoon program participated. Overall, residents found this session to be useful (85.7%) and 64.3% indicated confidence in performing this procedure on patients with supervision. Similarly, 64.3% of participants found this teaching session effective compared to other procedural model experiences and 100% rated satisfaction with the teaching session. Statistically significant improvements were seen pre- and post-session for familiarity with the Vandenbos procedure (p=0.002), adequate preparation to assist and anticipate the steps (p=0.004), confidence in performing with supervision (p=0.02), and the importance of the Vandenbos procedure to family physicians (p=0.02).

Discussion: These findings align with other studies that suggest that models improve procedural learning. As most participants were in first year of postgraduate training, it is unclear if perceived session benefits would be similar at more advanced stages. Qualitative responses may also have been informative.

Conclusions: Incorporation of this ballistic model into the residency procedural skills program would increase residents’ confidence in performing the Vandenbos procedure, which may in turn increase procedural availability.
**Recommendations:** Further studies with larger sample sizes and open response questions, including ballistic models for other surgical procedures, are recommended, potentially demonstrating further increases in resident procedural skills and confidence.

**References:**

16. Loveys AJ. “A family doctor can do that!” Is there a role for a formalized referral network for office procedures in family practices of Newfoundland and Labrador? [thesis]. [London (ON)]: Western University; 2015. 139 p.


What are the challenges to infant feeding for women of Prince Albert within the first two months of postpartum?

Preston O’Brien, FMR II; Hyesun Lee, FMR II; Breanna Davis, MD, CCFP; Rhonda Bryce, MD, MSc; Vivian R Ramsden, RN, PhD, MCFP (Hon.)

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: The benefits of breastfeeding are extensive and national guidelines recommend exclusive breastfeeding until 6 months of life. While breastfeeding initiation rates are 81% in Prince Albert, Saskatchewan, they drop dramatically after discharge from hospital. Research is needed to identify which factors influence decreased rates within the early postpartum period.

Question(s): What are the challenges to infant feeding for women of Prince Albert within the first 2 months of the postpartum period?

Methods/Methodology: Women within 2 months postpartum were invited to complete a survey on potential challenges to infant feeding practices. The survey was approved by the University of Saskatchewan Ethics Board (Beh ID 2451).

Results/Findings: Of 24 participants, 15 reported exclusive breastfeeding (EBF) and 9 non-exclusive breastfeeding (nEBF). EBF cohort trended towards married status (p=0.09) and higher education (p=0.012). EBF was planned in 75% of participants (100% of EBF cohort) and 9 women reported expected BF duration >6 months. Within the nEBF cohort, 33% changed feeding practices before 1-week and 33% before 8-weeks postpartum. Both groups were started on contraception within 6-weeks postpartum (EBF 40% vs nEBF 100%). More than 50% of women had at least 1 prenatal and postpartum infant feeding discussion. EBF participants had greater contact with Maternal Visiting Program than nEBF (66.7% vs 44.4%) and had more support contact overall (median number 3 vs 2). Only 46% of participants reported a physician BF discussion postpartum. Qualitative factors included: caregiver burden, certainty of intake, neonatal jaundice, prior experience, and strong community resources.

Discussion: Support of infant feeding must be emphasized by all healthcare professionals throughout all stages of obstetrical care. Family physicians play an important role and should be involved throughout this continuum. Participants report having access to community resources, but contact may be of importance. Breastfeeding specific contact with MVP and nursing postpartum was strongest in the EBF cohort. Possible influences requiring more research include contraception, in home support, personal experience and neonatal factors.

Conclusions: Further research is needed to identify challenges to infant feeding for women of Prince Albert within the first 2 months of the postpartum; however, current supports appear to be of benefit.
References:
Supporting Early Childhood Literacy in a Primary Care Setting – Family Intervention

Jennifer Knibbs, FMR I; Ginger Ruddy, MD, CCFP; Oluwabukunmi Adesina, BSP
Rhonda Bryce, MD, MSc; Meredith McKague, MD, CCFP

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

Abstract

Background: Adults with poor literacy have been found to be in overall poorer health. This has shown to be an extension of poor childhood literacy.

Question(s): Does a physician-led early literacy promotion program in a primary care setting improve literacy practices of primary caregivers with children aged six months to five years?

Methods/Methodology: This pilot study used a mixed methodological approach, obtaining both quantitative and qualitative data, and aimed to include a minimum of 30 individuals who had completed both the pre- and post-intervention surveys. The intervention included a physician discussing book sharing with primary caregivers during their child’s Well Child visit. In addition, they were provided a free age-appropriate book and the waiting room of the clinic was designed to be literacy focused. This project was reviewed and approved by the University of Saskatchewan’s Behavioural Research Ethics Board.

Results/Findings: There was a total of 34 participants for this study. Twenty-three participants completed both the pre- and post-survey. Eleven individuals did not complete the follow up survey. Book-sharing frequency increased in the post survey with 91.3% selecting they were reading to their children more than five days a week as compared to 78.3% (p=0.38) and 8.7% were reading three to five days a week as compared to 21.7% in the pre-survey. Reading with their child as one of their top three favourite activities was reported 65.2% of the time in both the pre- and post-surveys. A total of 21.7% (95% CI 7.5%, 43.7%) of caregivers reported that the physician speaking to them about reading with their child and providing them a book had changed the way they read or shared books with their children.

Discussion: The intervention was successful in changing book-sharing practices in five of the twenty-three respondents.

Conclusions: A physician-led early literacy promotion program in a primary care setting has potential to improve the literacy practices of parents with children aged six months to five years.

Recommendation: We strongly encourage additional evaluation of literacy programs in primary care appointments with children, with a view to their possible inclusion as a standard of care.
References:


Approach to Young Adult’s Health Screening in Saskatchewan and Assessment of the Need of Implementation of a Standardized Screening Tool

Yusra Taufique, FMR I; Sharlyn Khan, FMR I; Kaitlyn Hughes, MD, CCFP
Rejina Kamrul, MD, CCFP, FCPC; Adam Clay, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Young adults aged 18-24 years require special attention and care because of their vulnerable developmental stage. Although family physicians provide health care to young adults, they might be less aware of the specific needs and risk factors of this population as well as the targeted resources and guidelines available. The College of Family Physicians of Canada endorses the use of Greig Health Record for Young Adults. It will be pertinent to explore the related attitudes, barriers and need for a standardized screening tool for young adults in family practice

Question(s):
1) What are the practices and comfort-level of Saskatchewan-based family physicians when providing preventative screening of young adults?
2) What are the barriers to effective screening?
3) Is there a need for a standardized screening tool for young adults in family practice?

Methods/Methodology: An online cross-sectional, quantitative survey which assessed screening methods, physician confidence and potential barriers to screening was distributed to Saskatchewan-based family physicians through the Saskatchewan Medical Association (SMA) newsletter. This project was reviewed and approved by the Behavioural Ethics Board of the University of Saskatchewan.

Results/Findings: 14 responses were collected. 57% were in favor of a structured tool for screening young adults; however, only 21% were familiar with the Greig’s Health Record. 64% felt somewhat comfortable in preventative screening. The main barriers to effective screening were lack of time and knowledge about recommended guidelines and tools.

Discussion: Integration of the Greig’s health record into residency training can increase exposure to the screening tool. Similarly, education around guidelines may improve the comfort level of practicing family physicians in preventative healthcare of young adults as this was an identified barrier to effective health screening.

Conclusions: The majority of family physicians recognized the need for a standardized screening tool to provide effective preventive care. The main barriers to effective screening were lack of time and knowledge about recommended guidelines and available tools. Due to the small sample size, further research is needed.
**Recommendations:** A quality improvement project of implementing Greig’s health record in the EMR could be performed at a local clinic to access the efficacy of this tool.

**References:**


Adolescent Social Media Use and Depression at a Regional and Urban Family Medicine Clinic in Saskatchewan

Suranjan Bairagi, FMR II; Adam Clay, MSc; Andrea Vasquez Camargo, MD, CCFP, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Social media and gaming use is increasing among adolescents. The association between mental health, social media and gaming remains unclear. This study assessed the association between social media, gaming and depression among adolescents in a family practice setting.

Research Question(s): What is the prevalence of high-risk social media and gaming use by adolescents seen in family practice in Saskatchewan? Is there correlation between PHQ9 scores and social media and gaming use in this population?

Methods/Methodology: Patients aged 15-18 who accessed the Family Medicine Unit (Regina) or Associate Medical Clinic (Prince Albert) for virtual appointments in March 2021 were invited to participate in an online cross-sectional survey. The survey collected demographics and information on their social media use, gaming and mood using the Bergen’s Social Media Addiction Scale (BSMAS), Social Media Disorder Scale (SMD), Gaming Addiction Scale (GAS) and Patient Health Questionnaire (PHQ9). Statistical analysis, including a spearman correlation, was performed using SPSS 22. The study received approval from the Behavioral Research Ethics Board at University of Saskatchewan.

Results/Findings: The average age of respondents was 17.1 (15-18, n=10) of which 80% were female and 80% were Canadian born. The prevalence of high-risk social media use was 30% (95% CI:9-61%) using the BSMAS and 20% (95% CI:4-50%) using the SMD. The prevalence of high-risk gaming prevalence was 40% (95% CI:15-70%) using the GAS. Moderately severe and severe depression prevalence was 40% (95% CI: 15-70%) using the PHQ9. PHQ9 scores were strongly correlated with the BSMAS ($r_s=0.828$, $p=0.003$). No statistically significant correlations were observed between PHQ9 and SMD ($r_s=0.51$, $p=0.125$) or GAS ($r_s=0.25$, $p=0.486$).

Discussion: High risk social media and gaming use in this study was more commonly reported than in previous studies. However, the small sample size may not be representative of the local population and impacted the validity of the study results.

Conclusions: Many adolescents presenting for care reported high-risk social media and gaming use. When using the BSMAS, there was a strong correlation between social media use and PHQ9 score in the adolescent population of interest.
References:
Patient Experience and Utilization of Exercise Prescriptions at West Winds Primary Health Centre: A Quality Improvement Project

Mark Rodger, FMR II; Kirsten Jewitt, FMR II; Cathy MacLean, MD, CCFP, FCFP, MCiSc (Family Medicine), MBA, CCPE; Rhonda Bryce, MD, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Primary care providers understand that physical activity is important, particularly given the increased prevalence of exercise-modifiable diseases. One initiative to encourage consistent physical activity is the provision of formal exercise prescriptions; however, a crucial missing understanding in utilizing this approach is the patient perspective. This study explores whether or not an exercise prescription is an effective, sustainable, and patient-centered endeavor for West Winds Primary Health Center (WWPHC) patients.

Question: To understand the barriers experienced by patients in implementing formal exercise prescriptions, aiming to improve prescription quality and adherence at WWPHC.

Methods/Methodology: Exemption as a quality improvement study was granted by the University of Saskatchewan’s Behavioral Research Ethics Board. The study population included all adult patients documented in the WWPHC electronic health record as having ever received an exercise prescription. Potential participants were invited by mailed, and those responding completed a phone interview. Open-ended and Likert-scale questions evaluated the prescription experience, physical activity impact, and potential improvements. Descriptive and thematic analyses followed.

Results/Findings: Of 69 potential participants, five individuals participated. Reasons for the prescription differed across participants. All found the activities realistic and comprehensible. Four participants registered benefits, although one participant did not find the prescription helpful in any aspect and would have preferred a variety of exercise prescriptions options. Most agreed that doctors should provide exercise prescriptions, although two indicated that general exercise advice would be equally effective. All continued to maintain an increased physical activity level, with four continuing to exercise based on their original prescription.

Discussion: Despite few participants, valuable information was obtained. The continuation of increased physical activity suggests that exercise prescriptions may have longevity and therefore sustainably improve patient health. Notably, not all patients find their prescription useful.

Conclusions: Exercise prescription may have potential to increase levels of physical activity in a sustained manner. However, activities may need to be tailored to a particular individual’s preferences or, alternatively, a variety of activity options should be provided to increase perceived usefulness.
**Recommendations:** Future studies should focus on discerning optimal prescription characteristics. Additionally, work should evaluate the experiences of patients who do not view their exercise prescription positively.

**References:**


Lac La Ronge Indian Band (LLRIB) First Nation: Exploring Perceptions of Physical Activity

Brendan Groat, FMR II; Jeff Irvine, MD, CCFP; Lac La Ronge Indian Band Council
Rhonda Bryce, MD, MSc; Vivian R Ramsden, RN, PhD, MCFP (Hon.)

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: LLRIB members are interested in understanding how their communities regard physical activity (PA), including traditional practices. They would like to better understand attitudes, values, motivations, and dynamics that promote physical activity (PA), believing in its potential to improve health.

Question(s): What are the perceptions (e.g. perspectives, attitudes, beliefs, values, and meanings) around PA (e.g. movement, and exercise) of LLRIB members? How might these influence participation in PA? What are the PA barriers?

Methods/Methodology: Components of Transformative active research (TAR) and participatory narrative inquiry (PNI) design were used. Participating community members were engaged in audio-recorded semi-structured telephone interviews. Transcripts underwent inductive thematic qualitative analysis. The study was approved by the LLRIB Council, Northern Medical Services, SHA, and the University of Saskatchewan Behavioral Research Ethics Board (ID: 2306).

Results/Findings: Limited data collected from two participants suggests themes of perceptions of PA as related to ‘health’, ‘getting outside’, ‘being a role model, especially for children’, ‘fun’, and ‘social interaction’.

Discussion: The impetus for this project, importantly, came from LLRIB members themselves. The original intention was to respect local ways of interaction and engage LLRIB members informally. This was overly lost as the project progressed, particularly through institutional ethics approval and with the COVID-19 pandemic. It is the researcher’s impression that recruitment was difficult because clinic staff felt awkward engaging LLRIB members, in part because there may be a distrust associated with research and institutional ways, as associated with colonization. Indeed, a LLRIB council member commented in kind. The inherent time limitation of a medical residency also contributed. These aspects may have contributed to difficulty in recruitment and interview of participants and, ultimate, answering of community directed questions around perceptions of PA.

Conclusions: Saturation of themes was not achieved due to inadequate sample size, though there appears to be an emergence of themes of perceptions of PA as related to ‘health’, ‘getting outside’, ‘being a role model, especially for children’, ‘fun’, and ‘social interaction’.
**Recommendations:** Repetition of this project could utilize complete TAR and PNI methods, better address discrepancies between institutional and local ways and ethics, and plan for open-ended time for completion.

**References:**


**Implementation of Advance Care Planning at the Family Medicine Unit**

Matthew Bzura, FMR II; Haidar Kubba, FMR II; Steve West, FMR II; Solveig Nilson, MD, CCFP; Lori Schramm, MD, CCFP; Adam Clay, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

**ABSTRACT**

**Background:** Advance care planning (ACP) is a verbal and written communication process that involves preparation of a plan for a time when an individual cannot make medical decisions for themselves. ACP increases patient-centered care, reduces caregiver burden and healthcare costs. Unfortunately, 80% of Canadians have thought about end-of-life care but less than 20% has ACP. Moreover, there is little information on the extent of ACP in Saskatchewan primary care practices.

**Research Question(s):** What is the current level of engagement of Family Medicine Unit (FMU) patients in advance care planning according to the Stages of Change Model?

**Methodology:** An anonymous, self-administered survey asked participants age ≥70 years attending the FMU COVID-19 Vaccine clinic in Regina, SK on April 10, 2021 about their demographics, understanding of ACP, if/when they made an ACP, and if COVID had influenced their ACP thoughts/actions. Continuous variables were summarized as median and categorical responses were summarized as counts and percentages. The University of Saskatchewan’s Behavioural Research Ethics Board provided a Certificate of Approval for this research project.

**Results:** A total of 133 surveys were completed. The median age of participants was 83 years, of which 66.2% identified as female. According to the Stages of Change model: 27% of participants were at precontemplation stage, 21% at contemplation stage, 16% at planning stage, 26% at action stage and 10% at maintenance stage.

**Discussion:** The number of individuals who have thought about ACP in Regina may be lower than the national average (59% vs 80%, respectively). This study also suggests that when respondents were considering ACP, more felt comfortable discussing ACP with their family physician and family compared to the national average (90% vs 80%) but were less comfortable discussing ACP with their partners (86% vs 93%).

**Conclusion:** Based on our findings, those who attended the FMU COVID-19 Vaccine clinic in Regina have a diverse level of engagement in ACP according to the Stages of Change Model.
References:
8. Canadian Hospice Palliative Care Association [Internet]. Ottawa (ON): Canadian Hospice Palliative Care Association; c2021. New poll shows that most people in Canada think it is important to do advance care planning but only few did; 2019 Jul 1 [cited 2021 May 11];[about 4 screens]. Available from: https://www.chpca.ca/news/new-poll-shows-that-most-people-in-canada-think-it-is-important-to-do-advance-care-planning-but-only-few-did/.
Evaluation of the Prince Albert Palliative Care Program

Mandeep Kaler, FMR II; Mary Lynn Beaulieu, FMR II; Alanna Surkan, MD, CCFP; Breanna Davis, MD, CCFP; Rhonda Bryce, MD, MSc; Vivian R Ramsden, RN, PhD, MCFP (Hon.)

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: The Prince Albert Palliative Care Program (PAPCP) aims to improve the quality of life and preserve the dignity of its patients.

Question(s): Our research project’s primary objective was to evaluate the strengths and weaknesses of the PAPCP. Secondary objectives included identifying symptoms that the program has difficulty addressing from a patient’s perspective and to gauge how often patients require additional health care services.

Methods/Methodology: A survey was sent by mail to all individuals currently in the PAPCP who had enrolled between March 14, 2019 and March 14, 2020. A total of nineteen surveys were collected and analyzed for this project. This project received an Exemption from the University of Saskatchewan Behavioral Research Ethics Board.

Results/Findings: Overall, participants identified access to allied health professionals in the multidisciplinary team as one of the most beneficial aspects of the program. Patients continued to struggle with poor appetite and fatigue. Features of the palliative care program that were least satisfactory included arrangement of family conferences and meetings, dissemination of information about patient symptoms and prognosis of their condition. Of the 19 participants, 77.2% required up to four medical appointments each month, 55.6% of participants have required up to four emergency room visits since their diagnosis, 5.6% of patients have needed over ten emergency room visits since their diagnosis and 72.2% have required hospitalization during their palliative diagnosis. Only 84.2% of participants reported that the PAPCP facilitated continuity of care. Startlingly, only 61.1% of patients in the program report that they have an advanced care directive.

Discussion: Generally, most palliative patients felt symptoms of their disease were well controlled while enrolled in the program.

Conclusions: Overall, the PAPCP appears to be meeting the needs of the patients that are enrolled. Areas of opportunity include improving communication and dissemination of information, and treatment of fatigue and nausea.

Recommendations: A future project could include reviewing how many patients in the PAPCP have advance care directives on their chart compared to how many believe they do, as well as
well as surveying the families of patients regarding their experiences in the palliative care program.

References:
Perceptions, Barriers and Facilitators to Acquiring Primary Care Panel Reports Produced by the Best Practice Team of Saskatchewan: Evaluating Primary Care Providers in Swift Current & Area

Emmett Harrison, FMR II; Kevin Wasko, MA, MD, CCFP(EM), CCPE; Adam Clay, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Introduction: Primary care panel reports (PCPR) provide physicians with an overview of their patient demographics, and patient contacts with care to drive patient centered quality improvement within their primary care practices. Limited user feedback has provided mixed support for PCPR in Saskatchewan. A formal evaluation to assess perceptions, barriers and facilitators to obtaining these reports is warranted in order to increase uptake of PCPR by Saskatchewan primary care practitioners.

Research Question: What are Saskatchewan physicians’ perceptions, barriers, or potential facilitators for uptake of Primary Care Panel Reports?

Methodology: A questionnaire was provided to every primary care physician in the former Cypress Health Region (Swift Current and surrounding area). Respondents who had previously obtained their PCPR were also invited to participate in a semi-structured interview that was transcribed and analysed for themes. An Exemption for this project received from the University of Saskatchewan’s Behavioural Research Ethics Board.

Results: Twenty physicians completed the questionnaire (48% response rate) and six physicians completed an interview. The respondents’ practice experiences were similar across the sample, region and province.

Of the respondents who had received their PCPR previously, few utilized the information even though they perceived the information to have utility that aligned with the PCPR objectives. The most common barrier identified was a delay in obtaining their report. The respondents’ suggested multimodal interpretation resources, supplemental QI resources, and novel metrics to facilitate their uptake of the report.

Discussion: The study itself increased potential uptake of the PCPR in the former Cypress Health Region. The second iteration (2021) of the PCPR has addressed some of negative perceptions and suggest facilitators identified by respondents. All feedback will be analysed for future improvement of Saskatchewan’s PCPR.

Conclusions: Respondents had many negative perceptions of PCPRs regarding data quality, metrics, and application that are rooted in mistrust. Trust may be obtained by improving data sources, supporting data application and incorporating feedback.
**Recommendations:** It would be useful to obtain annual feedback from both PCPR users and non-users, especially qualitative narratives, to improve upon future iterations of the report. This could be done by expanding the current internal feedback processes.

**References:**

1. Applequist J, Miller-Day M, Cronholm PF, Gabbay RA, Bowen DS. “In principle we have agreement, but in practice it is a bit more difficult”: obtaining organizational buy-in to patient-centered medical home transformation. Qual Health Res. 2017 May;27(6):909–22.
Abortion Care – Where do we Stand and Where to Go from Here?
A Qualitative Assessment of the Patient Experience of abortion care in southern Saskatchewan

Susan McLellan, FMR II; Anam Siddique, FMR II; Megan Clark, MD, CCFP
Sally Mahood, MD, CCFP; Adam Clay, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: While abortions have been legal in Canada since 1988, access to a safe and timely abortion is still complicated. The Women’s Health Centre (WHC) in Regina is currently the sole access point for surgical abortions in Southern Saskatchewan. This study aims to assess the dimensions of care at WHC through Dawson’s framework of availability, accessibility, affordability, acceptability, and quality.

Question: What was the patient experience of accessing a medical or surgical abortion in Southern Saskatchewan, and how can it be improved?

Methodology: Patients who received a medical or surgical TOP at the WHC between Sept 21, 2020 and January 15, 2021 were offered an online survey regarding type of abortion, wait times, costs associated, and overall quality based on Dawson et al.’s framework. Data was summarized using descriptive statistics for Likert-item and multiple-choice questions. Ethical approval was received from the University of Saskatchewan’s Behavioral Research Ethics Board.

Results: Two out of 15 participants had medical, and thirteen had surgical terminations. The distance travelled averaged 190km, (range 4km to 550km). The associated out-of-pocket costs for patients ranged from $0 to $450 with annual household income under $50,000 for 50%. Biggest challenges reported were stigma, distance travelled and associated cost. Patients rated their overall experience at an average of 4.14 on a 5-point Likert scale. The majority of participants reported a good experience, some qualitatively reported concerns with privacy pre- and post-operatively, travel time for early appointments, and feeling pressured to decide about post-TOP contraception.

Discussion: The average distance travelled was greater than two of three comparable studies. The average wait time from first contact to TOP appointment was 9 days, which is much lower than other Canadian studies. The majority (71%) of our respondents reported being happy with their overall experience.

Conclusion: The overall feedback from patients is that the WHC is accessible, caring, and compassionate. The identified areas for improvement involved pre- and post-procedure privacy, considering travel time when scheduling appointments, and earlier information about contraception choices.
Recommendations: Future areas of research could include focused patient interviews regarding patients’ paths to care, barriers faced, and hidden costs.

References:
8. Foster AM, LaRoche KJ, El-Haddad J, DeGroot L, El-Mowafi IM. "If I ever did have a daughter, I wouldn't raise her in New Brunswick": exploring women's experiences obtaining abortion care before and after policy reform. Contraception. 2017 May;95(5):477-84.
Cancer Screening Rates in Women over Fifty in northern Saskatchewan: 
A Retrospective Chart Audit

Amy Heitzner, FMR II; Caitlin Yeager, FMR II; Mark Spiess, FMR II; Rhonda Bryce, MD, MSc 
Breanna Davis, MD, CCFP, FCFP; Vivian R Ramsden, RN, PhD, MCFP (Hon.)

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Family physicians are preventative health experts and hold vast knowledge of the 
benefits of cancer screening. However, with busy clinics, extensive patient agendas, and 
recommendations against annual physical examinations, our cancer screening rates may not be 
ideal.

Questions: This study aims to determine the screening rates of the clinics in Prince Albert 
compared to the national average and if there are certain characteristics or factors amongst 
providers or patients that predict cancer screening.

Methods: This retrospective chart audit included 500 female patients aged fifty to seventy from 
four varied clinics in Prince Albert, Saskatchewan. Using the clinics’ EMR, we determined if 
their reported screening for breast, cervical, and colorectal cancer were up to date over the last 
three years.

Results: Results demonstrate that 53.0%, 47.6%, and 45.2% of women studied had recent breast, 
cervical and colorectal cancer screening respectively. The rate of colorectal screening is 
comparable to the Canadian average, however, the rates of breast and cervical screening are 
staggeringly low in comparison. Only 25.9% of eligible women had all three screening 
investigations completed. Having at least one visit over the last year or having a complete 
appointment in the last three years increased the likelihood of breast and cervical screening.

Discussion: It is our hope that further quality improvement research will be performed to guide 
implementation of the changes necessary to raise the current cancer screening rates in Prince 
Albert.

Conclusions: This chart audit reveals that the patients of Prince Albert family physicians are not 
meeting national screening targets for breast and cervical cancer, and thus, improvement is 
required.
References:
Impact of Family Physicians provided Vasectomies on future Men’s Health Discussions in the Primary Care Setting

Austin Little, FMR II; David Boyle, MD, CCFP; Kelsy Leavins, MD, CCFP; Adam Clay, MSc
Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Male patients are less likely to seek care and physicians find it difficult to initiate gender-specific care. These concurrent barriers place men at a disadvantage in accessing adequate care in such topics as men’s health. Patient-physician rapport plays an important role in facilitating these discussions. Locally, a family physician has incorporated vasectomies into his practice, which are performed in the clinic. This provided opportunities to build rapport while addressing a men’s health concern.

Research Question(s):
1. What are the experiences of men receiving a vasectomy provided by a family physician?
2. Does the patient’s experience impact their willingness to discuss future men’s health concerns with a primary care provider?

Methods/Methodology: An anonymous cross-sectional survey was conduct with men that underwent a vasectomy by Dr. Boyle. Participant experience and interest in future men’s health discussions was gathered. Categorical variables were described as frequencies and percentages. The project was reviewed and approved by the Behavioral Research Ethics Board at the University of Saskatchewan (Ethics ID #2232).

Results/Findings: The response rate was 72% (18/25). Over 61% were satisfied or very satisfied with the procedure. Only 22% preferred having the vasectomy done in their family physician’s clinic; meanwhile 61% did not want a referral to a specialist for the procedure. Regarding future men’s health discussions, more than half remained at the same level of interest while 28% were more interested after their vasectomy. The relationship between the participant’s experience and their interest in future men’s health discussions could not be statistically evaluated.

Discussion: Overall, men were satisfied with their experience. Some participants endorsed a level of rapport with the physician performing the procedure. This may have contributed to the increased willingness to discuss men’s health topics in some participants.

Conclusions: Patients that underwent a vasectomy by a family physician were satisfied with the procedure. A subset of the participants wanted to have further discussions regarding other men’s health topics. Whether their positive experience and willingness to discuss these topics is statistically related has yet to be determined.
References:
An Assessment of Erectile Dysfunction Screening in Diabetics at a Primary Health Centre

Kyle Painchaud, FMR II; John Schulte, FMR II; Andries Muller, MBChB, CCFP, FCFP, PhD

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Erectile dysfunction (ED) is a common and distressing condition that is experienced by men as they age. In addition to causing psychological distress, erectile dysfunction can also be an early sign of cardiovascular disease. As family physicians we have the responsibility of screening for this treatable condition. Type II diabetics are at an increased risk of developing ED and should be screened regularly.

Question(s): Are diabetic patients attending WWPHC being appropriately screened for erectile dysfunction?

Methods/Methodology: This quality improvement (QI) project undertook a retrospective chart review of data from West Winds Primary Health Centre (WWPHC). The aim of this project was to identify the successes and gaps in the screening of diabetic patients for Erectile Dysfunction (ED) at WWPHC. The data for this project involved a subset of male patients who had both billed a Chronic Disease Management (CDM) appointment and had documentation in the validated template (n=117). A descriptive analysis was undertaken. An Exemption was received from the University of Saskatchewan’s Bio-Medical Research Ethics Board.

Results/Findings: We discovered that 49.6% of individuals in our inclusion criteria were screened appropriately.

Discussion: Given that our inclusion criteria limited us to patients who had a documented and billed CDM appointment, the true burden of ED as well as missed screening opportunities are likely much higher, as there is no prompting for care providers to ask about ED with routine documentation. While there was an overall reduction in CDM appointments secondary to reduced patient interaction in the pandemic, it does account for the entirety of variation in incorrectly billed and documented visits, as only three of our 18 months were affected by COVID-19 restrictions.

Conclusions: Only 49.6% of the patients reviewed for CDM over the 18-month period were screened for erectile dysfunction. Of the charts reviewed, only 8.5% of patients had previously documented sexual dysfunction highlighting a further area for practice improvement.

Recommendations: It is recommended that health care providers at WWPHC make a greater effort to screen patients for sexual dysfunction during CDM appointments. It is further recommended that efforts be directed into updating patient charts as only a small percentage of
patients suffering from erectile dysfunction had this reflected in their records. Further QI studies should evaluate the documentation around diabetic visits as it was suspected that a significant number of patient visits were not documented on the provincial CDM form.

References:
Assessment of physician-to-physician hospital handover and its impact on patient safety in Moose Jaw, SK

Ava McDonald, FMR II; Evan Payette, FMR II; Anton Savin, FMR II
R Brandon Thorpe, MD, CCFP; Adam Clay, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: A Family Practice Department Meeting in Moose Jaw, SK identified concerns over the quality of physician-to-physician inpatient handover. Previous studies have highlighted handover being a “high-risk” process for patient safety/confidentiality that would benefit from standardization and further quality improvement initiatives. There is no local data detailing the methods of current handover and the associated satisfaction in Moose Jaw.

Question(s): Our study assessed current handover methods and associated physician satisfaction, impact on patient safety/confidentiality and suggestions for future quality improvement initiatives at the Dr. F.H. Wigmore Hospital in Moose Jaw, SK.

Methods/Methodology: A cross-sectional study was designed using qualitative and quantitative methods modeled from previous studies. Any physicians that participated in inpatient care at the Moose Jaw hospital in the past six months were included (or the preceding six months if hospital care was affected by the COVID-19 pandemic). Survey distribution and analysis was conducted by SurveyMonkey. Being a program evaluation, this project received an Exemption from the University of Saskatchewan’s Behavioural Research Ethics Board.

Results/Findings: After exclusion, 22 respondents completed the survey in full. Many respondents utilized various interactive methods for handover, spending 3-5 minutes per patient. Half of respondents indicated they “rarely” use the Physician-To-Physician Handover Document, and that code status was “rarely” communicated in handover. Six (27.3%) indicated one or more patient harms or near-misses occurring in the preceding 6 months. Patient confidentiality was “very often” maintained during handover. Fourteen (63.6%), were at least “satisfied” with how they received handover.

Discussion: The new inpatient GP program has implemented standardized, electronic charting and handover with high satisfaction. A more structured approach to handover should be adopted by all physicians, as this has been shown to reduce patient harms. Omission of code status in handover is another area of concern as it is important in critical moments of patient care.

Conclusions: Suggestions for improving handover include updating patient status when transferring care, using a validated communication tool, establishing a set time of day for face-to-face handover, and encouraging continuous feedback when handover is carried out inadequately.
**Recommendations:** Future studies could include more specialists, allied healthcare, and other sites for generalizability.

**References:**
Phenobarbital as a Method for Treating Alcohol Withdrawal in the Inpatient Setting in North Battleford, Saskatchewan

Sarah Penney, FMR II; Alexandra Pistore, FMR II; Braden Bouchard, BEng, MBBS, CCFP; Clinton Meyer, MD; Rhonda Bryce, MD, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Alcohol-related hospitalizations represent a significant cost to the Canadian health care system. Evidence suggests that phenobarbital can be used to treat alcohol withdrawal syndrome, however the cornerstone of withdrawal therapy in Canada remains benzodiazepines. To date, no studies exist comparing the two treatment modalities in a relatively resource-poor setting such as a regional emergency department (ED).

Question(s):
1. Among adult patients experiencing alcohol withdrawal syndrome in the ED of a small tertiary centre, does phenobarbital versus benzodiazepine monotherapy decrease the length of emergency department length of stay (LOS)?
2. Among adult populations experiencing alcohol withdrawal syndrome in the ED of a small tertiary centre, does phenobarbital versus benzodiazepine monotherapy decrease the rate of alcohol withdrawal-related admissions?

Methods: This project received an Exemption from the University of Saskatchewan’s Biomedical Research Ethics Board. A retrospective observational study was performed on all alcohol withdrawal presentations to Battleford Union Hospital ED from June 2019 to January 2021. Univariate and multiple regression modeling was performed.

Results/Findings: Among 83 patients, 57 of 185 presentations (30.8%) were treated with phenobarbital. Median LOS for phenobarbital versus benzodiazepine therapy was 4.2h and 4.4h, respectively (p=0.25). Of the phenobarbital presentations, 9.3% were hospitalized versus 17.1% of the benzodiazepine presentations (p=0.18). When adjusted for confounders, phenobarbital-treated presentations were 76.7% less likely to be admitted (p=0.01).

Discussion: According to our data, phenobarbital and benzodiazepine monotherapy have similar ED LOS. Phenobarbital monotherapy results in a reduction in hospitalizations. Our findings are in agreement with those available in current literature. Strengths of our research include a novel perspective on phenobarbital use in a regional ED. Our study is limited by a relatively short study period.

Conclusions: The research suggests that phenobarbital performs similarly to benzodiazepines regarding alcohol withdrawal ED LOS and may result in a reduced rate of
hospital admission.

**Recommendations:** This research would be well applied to small and large EDs alike. Future directions may include increasing the number of patients in the study, trialling the phenobarbital pathway in other EDs, and exploring health care-worker attitudes towards the different pathways.

**References:**


Assessing the Attitude and Behaviours of Family Physicians in Saskatchewan towards Smoking Cessation: Is Introducing a Tapering Schedule a Potentially Useful Tool in Family Practice?

Haseena Salim, FMR II; Danielle Frost, MD, CCFP; Adam Clay, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Tobacco use is one of the largest public health threats, killing more than 8 million people annually worldwide. Minimal research has investigated a tapering schedule for smoking cessation coupled with current pharmacological approaches/interventions. In addition, no specific studies have investigated fundamental barriers in family practice around smoking cessation in Saskatchewan, including behaviours or strategies that are perceived effective and commonly used.

Research Question(s): What are the barriers and behaviours of family physicians in Saskatchewan towards smoking cessation? Do physicians view a tapering schedule as a potentially useful tool in family practice?

Methods/Methodology: A cross-sectional electronic survey of Saskatchewan-based family physicians was distributed in February 2021. The survey explored smoking cessation counselling practices and barriers to smoking cessation counselling using a series of Likert-items. Data was analyzed descriptively. The study was approved by the University of Saskatchewan’s Behavioural Research Ethics Board.

Results/Findings: 8 individuals responded to the survey. Most respondents (n=6, 75%) had no formal training in smoking cessation counselling, but training was not identified as a barrier to delivering effective counselling. A lack of available local programs (57%), limited coverage of cessation interventions for patients (71%) and lack of patient motivation to quit (71%) were reported as moderate or extreme barriers by family physicians. Eighty-six percent deemed a tapering schedule as an intervention they would likely incorporate into their practice in conjunction with nicotine replacement therapy or pharmacotherapy.

Discussion: System-based barriers represent the majority of barriers identified (ie - lack of available local programs and limited coverage for patients). Our data shows from a family physician’s perceptive; a tapering schedule may have some promise. Further research needs to be done to engage with a larger audience of family physicians, obtain the patients perspective on the utility of a tapering schedule and conduct a randomized control trial to assess clinical outcomes.

Conclusions: The majority of physicians in our study enquire about a patient’s smoking status and discuss available interventions. Major system-based barriers exist. From the physician’s
perspective, a tapering schedule may be a useful tool that could be incorporated if coupled with current smoking cessation interventions.

References:
A Retrospective Chart Review and Descriptive Analysis of Dermatology Referral Characteristics at West Winds Primary Health Centre

Jasmene Uppal, FMR II; Isvarya Venu, FMR II
Jill Farrukh, MD, CCFP; Rhonda Bryce, MD, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: Research regarding dermatology referral by Canadian family physicians is limited despite high referral rates and long wait times. By understanding the nature of referrals, strategies improving care access and effectiveness can be implemented.

Question(s): What are the characteristics of dermatological referrals at West Winds Primary Health Centre (WWPHC)? What is the content of dermatological referral documentation at WWPHC?

Methods/Methodology: A retrospective chart review examined all WWPHC dermatology referrals over one year (January 1-December 31, 2019). Descriptive statistics quantified referral characteristics and key aspects of referral letters. This project received an Exemption from the University of Saskatchewan’s Bio-Medical Research Ethics Board (Bio 2566) and received SHA Operational Approval.

Results/Findings: Overall, 130 pediatric and adult referrals from residents and faculty were examined. Mean patient age was 46.4 years (SD=22.0). Frequently there were no recognized treatment barriers (80%); however, issues of incomplete resolution (11.5%), diagnostic uncertainty (2.3%), size/location (2.3%), treatment uncertainty (1.5%) and cosmetics (1%) were noted. Most commonly, referrals requested management support (90.8%). Non-urgent concerns constituted 92.3%, with 79.2% at first presentation referred immediately. Median wait times for non-urgent and urgent consultations were 84 days (IQR 36.5, 276.5) and 21.5 days (IQR 6.5, 97.5) respectively. Consultant ICD-11 diagnostic categories included benign proliferations (13.8%), inflammatory dermatoses (12.3%), papulosquamous disorders (10%), and acne/related conditions (9.2%).

Symptom description, duration, exam findings, physician treatment, and past medical history were respectively described in approximately half of referral letters. Less frequently included were patient-initiated treatments (8.5%), medications (32.3%), and past surgical history (15.4%). The median number of information pieces per letter was three.

Discussion: Information assessed in this study may not be relevant for all referral concerns. Findings are also restricted by reliance on the referral letter; actual prior treatment was not assessed. In evaluating only referred patients, overall dermatological care quality at WWPHC cannot be evaluated.
Conclusions: Referred conditions vary widely. Referral is often immediate and without obvious treatment barriers. Room for improvement exists regarding referral letter quality; however, whether more detailed referral letters would improve care access and quality is undetermined.

Recommendations: A standardized clinic referral form and teaching modules on commonly referred diagnoses could impact referral burden.

References:
Roles and Responsibilities of Tertiary-Care Associated Urgent Care Clinics: A Rapid Literature Review

Ponn Benjamin, FMR II*; Rhonda Bryce, MD, MSc*; Taofiq Oyedokun, MD, CCFP-EM†; Jason Hosain, MD, CCFP*; James Stempien, MD, CCFP-EM†

*Department of Academic Family Medicine, College of Medicine, University of Saskatchewan; †Department of Emergency Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: The Saskatchewan government is investing thirty million dollars into building two new urgent care centers (UCCs) in Saskatoon and Regina. We wished to explore leading clinical practices as to what best defines UCCs.

Question(s): What are the roles and responsibilities of UCCs, staffed by healthcare professionals proficient in managing acuity, that operate in conjunction with tertiary care centers?

Methods/Methodology: A rapid review of the literature was undertaken to better understand best practices, and how similar centers function in other urban areas. Twenty-seven articles were included in the final synthesis. Exemption was obtained from the University of Saskatchewan’s Research Ethics Board.

Results/Findings: The main findings are (1.) The UCCs impact in reducing emergency department (ED) wait times may be substantially less than anticipated. (2.) The UCCs geographical location needs to be in close proximity to an ED. (3.) The UCCs facility is best situated in an underserved community. (4.) Collaboration and integration need to occur “early” between ED, UCC, emergency medical services, and primary care. (5.) The UCCs should be capable of handling emergent, urgent and non-urgent conditions. (6.) The UCCs should be staffed by Emergency Medicine (EM) Physicians, Family Medicine Physicians, and Allied Health Personnel who are proficient with acuity and primary care sensitive needs. Specialists in mental health and addictions should be recruited. (7.) Engagement of community partners and Indigenous leaders in the founding phase will contribute to the UCCs utilization and success.

Discussion: Since a universal definition of UCCs is lacking, it can be inferred that the operating mandate of UCCs can be defined by identified communal health needs and gaps. Several successful western Canadian UCCs exemplify the above findings.

Conclusions: Although definitive guidelines for UCC development are not readily available, the literature does offer some principles to optimize their effectiveness.

Recommendations: Saskatchewan’s UCCs are envisioned to manage episodic urgent and non-urgent medical and behavioral emergencies. The centers should be “EM Lite” facilities, with
laboratory services and basic diagnostic imaging. Personnel should be capable of handling both emergencies and primary care needs.

References:


32. Wong C. (Calgary Zone Urgent Care Centres, Calgary, AB). Email to: James Stempien (University of Saskatchewan, Saskatoon, SK). Date of email: 2021.03.23. Urban Urgent Care Strategic Planning ED Stakeholder Session: 2020 Sep 9.

33. Khazei A. (Department of Emergency Medicine, Vancouver General Hospital, Vancouver, BC). Email to: James Stempien (University of Saskatchewan, Saskatoon, SK). 2020 Dec 7.


Assessing the effectiveness of telephone visits with patients 
during the COVID-19 pandemic

Stephanie Ardell, FMR II; Tracy Leach, FMR II; Stuart Lockhart, FMR II
Braden Bouchard, BEng, MBBS, CCFP; Rhonda Bryce, MD, MSc

Department of Academic Family Medicine, College of Medicine, University of Saskatchewan

ABSTRACT

Background: The current COVID-19 pandemic has led to many physicians conducting telephone consultations with patients, only seeing those patients for whom it is deemed necessary for diagnosis and treatment at the recommendation of the Saskatchewan Health Authority. This “telephone consult first policy” was designed to reduce the number of in-person visits needed, saving the patient and physician time and limiting potential exposure to the virus. Until the pandemic, telemedicine approaches were only generally endorsed by medical authorities and regulators for primary care. Now, assessments of widespread telemedicine approaches, ushered in by the pandemic, are beginning to take place.

Question(s): Among primary care patients in North Battleford, is satisfaction with family physician visits via telephone at least as good as satisfaction with in-person visits in the context of the COVID-19 pandemic? A secondary question of patient preference regarding telemedicine approaches was also investigated.

Methods/Methodology: With approval from the University of Saskatchewan’s Behavioral Research Ethics Board, this descriptive study was conducted at the North Battleford Medical Clinic in the Spring of 2021. It sought to gauge patient satisfaction and preferences regarding telemedicine approaches. The Patient Experience Survey (PES) was employed with an addendum and results were compared with pre-pandemic surveys. The survey was not distributed to patients in the clinic waiting room as the PES had been previously but was instead administered over the telephone.

Results/Findings: A total of 63 participants agreed to be contacted to learn more about the study but only 45 participants were contactable and agreed to participate. Overall results were very comparable between Fall 2019 and Spring 2021, with the average visit rating for Spring 2021 at 9.0/10 in contrast to 9.4/10 in Fall 2019. Apart from the over 65-year-old age group, there was widespread enthusiasm for the continuation of telemedicine for future visits.

Discussion: Telemedicine offers more accessibility and convenience for the majority of patients and is likely a valuable asset in future patient care. Additionally, consideration may be given to age-specific preferences regarding telemedicine use post-pandemic.

Conclusions: Patient satisfaction levels have remained similar to pre-pandemic times, but variability exists regarding patient preference for telemedicine approaches.
References: