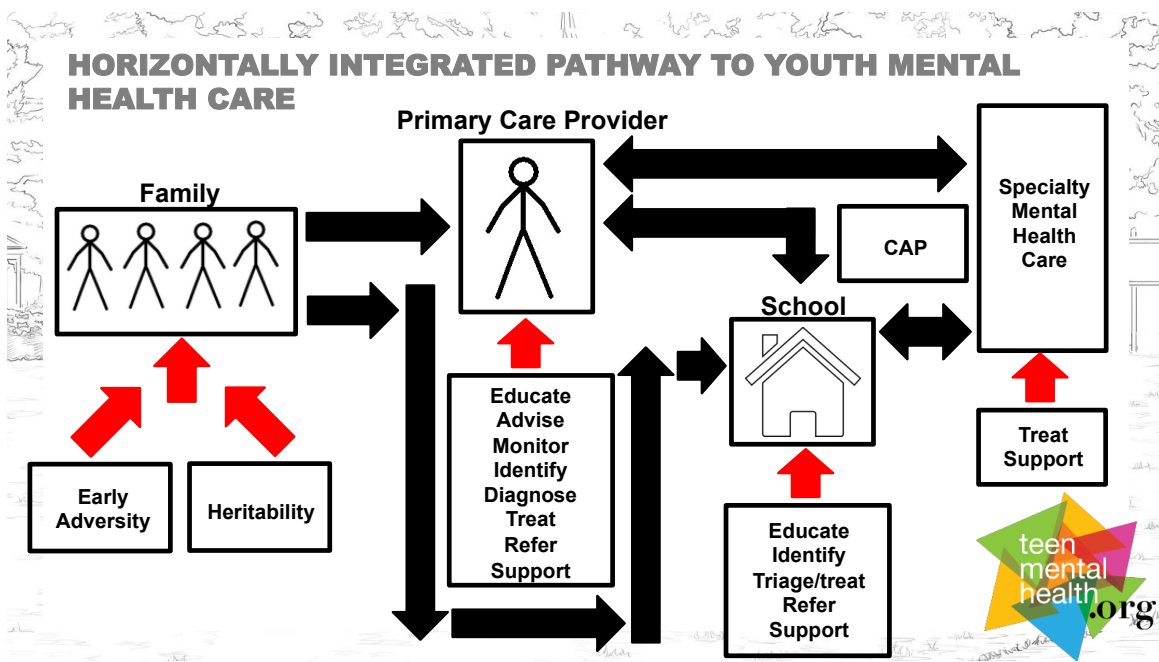




School Mental Health for Junior High/Secondary Schools: Innovation; Application and Evidence

All of our school related mental health work fits into the development and support of a horizontally integrated, system improving, sustainable and in-expensive approach to enhancing the Pathway Through Mental Health Care for young people and their families. This is schematically illustrated here (Figure 1):

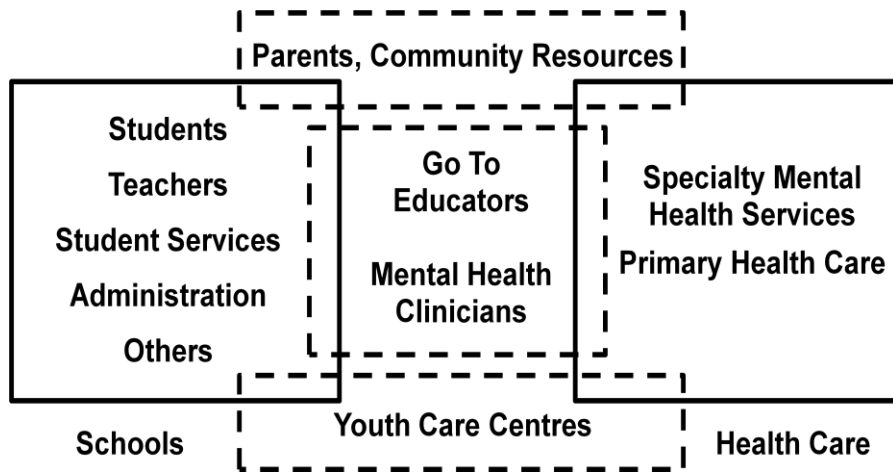
Figure 1: The Horizontal Pathway to Youth Mental Health Care: the foundation of the work of the Chair



All our school related work is based on applying best evidence demonstrated resources and interventions that are designed to build on and improving existing educational systems in a sustainable, pedagogically valid and cost effective way. We do not apply “programs” into schools; we work from the existing social ecology that exists within schools. None of our work is dependent on fidelity of implementation but we have created our resources and interventions in such a manner as to be able to demonstrate significant outcomes in our key indicators across schools, school locations and educational systems and jurisdictions, across Canada and abroad. All these interventions are also designed to link education and health care systems (figure 2)



Figure 2: Effectively Linking Education and Health Systems to meet youth mental health needs



There are three distinct but related school based interventions for which we now have very solid evidence of effectiveness, in Canada and elsewhere. These are: the classroom mental health literacy curriculum resource: the Mental Health & High School Curriculum Guide (the Guide) designed for grades 9 and 10; the “Go To” Educator Training program for case identification, triage and support; and the Transitions to post secondary schooling resource.

The Guide:

The Guide has been created with the purpose of becoming the national vehicle for the enhancement of mental health literacy SIMULTANEOUSLY for both teachers and students, using a simple, sustainable, pedagogically valid intervention. It is based on the WHO declaration of the fundamental importance of health literacy (of which mental health literacy is a key component) on improving and maintaining the health status of a population and enhancing access to care and driving better care outcomes.

Impact of Health Literacy
“a stronger predictor of an individual’s health status than income, employment status, education and racial or ethnic group”. WHO; 2013



The Guide resource is the only evidence based, nationally certified school mental health literacy resource in Canada designed to be applied in grades nine or ten. Originally developed in collaboration between Dr. Stan Kutcher and the Canadian Mental Health Association (national), the first version of the Guide was launched in 2009. The Guide addresses mental health literacy through 6 modules: the stigma of mental illness; understanding mental health and mental illness; information about specific mental illnesses; experience of mental illness; seeking help and finding support; the importance of positive mental health ([www.teenmentalhealth.org/curriculum \(password:t33nh3alth\)](http://www.teenmentalhealth.org/curriculum (password:t33nh3alth))). Since then the Guide (version 1.0) has been enhanced by Dr. Kutcher with teacher self-study materials, teacher and student assessment tools and a training program that assists classroom teachers in how to apply the Guide.

Mental Health Literacy: what is it EXACTLY?

- Understand how to obtain and maintain good mental health
- Understand and identify mental disorders and their treatments
- Decrease stigma
- Enhance help-seeking efficacy: know where to go; know when to go; know what to expect when you get there; know how to increase likelihood of “best available care” (skills and tools)
- Kutcher and Wei; 2014; Kutcher, Bagnell and Wei; 2015; Kutcher et al, 2016; Kutcher et al. 2016b.

Recently, the Guide has been updated (version 1.1) and a full suite of classroom ready teaching materials including lesson plans, core and supplementary learning resources (PowerPoint presentations, animated videos, web-based links, printable PDF format resources, and other materials) have been made freely available on-line at: [www.teenmentalhealth.org/curriculum \(password:t33nh3alth\)](http://www.teenmentalhealth.org/curriculum (password:t33nh3alth)).

The Guide is specifically designed to be easily embedded into existing educational systems. It is not a program that is added to or parachuted onto already stretched school environments; rather it builds on, enhances and sustains existing educational capacity. It is also pedagogically familiar to all teachers and uses application techniques that are already present in every Canadian classroom. It does not require fidelity of implementation to achieve successful outcomes (rather it uses teacher determined flexible strategies to teach the content), is easy to implement (lesson plans and classroom ready resources are embedded in the Guide) and is available on-line. It addresses both teacher and student mental health literacy concurrently, to our knowledge, the only such approach ever successfully documented in Canada. It is the only such approach to have scientific evidence for its positive impact in Canada.



This approach has led the re-vitalization of the definition of mental health literacy (MHL), following on and based upon the ongoing development of the construct of health literacy as promoted by the World Health Organization that considers health literacy as an empowerment tool for individuals to achieve better care of self and others, address social inequalities and improve health outcomes (WHO, Health Literacy: the solid facts. 2013). MHL has recently been redefined as a single construct encompassing four distinct but inter-related components: 1) understanding how to obtain and maintain good mental health; 2) understanding mental disorders and their treatments; 3) decreasing stigma; 4) enhancing help-seeking efficacy. This innovative and forward-looking definition is now being embedded in the academic literature (see Appendix for references).

The impact of the Guide has undergone extensive evaluation and research in Canada and elsewhere. The evaluations dataset is now available from 5 different Canadian provinces (NS, ON, MB, BC, AB) and additional investigations in these and other jurisdictions are currently underway or planned (see Appendix for related peer-reviewed publications).

Briefly put, this approach has been robustly demonstrated to SIMULTANEOUSLY enhance the MHL of both teachers and students in all studies pertaining to improvement of knowledge and decrease of stigma. For example, the impact of this intervention on both teachers and students has been substantially positive across all studies. “P” values have consistently been 0.001 or lower across all measures with “d” values ranging from 0.7 to 2.2 for increasing knowledge (meaning highly impactful) and 0.2 to 0.7 for decreasing stigma (meaning moderately to highly impactful). To our knowledge, these data are the strongest outcome data reported for any related school based intervention – globally (See Table 1).

Furthermore, the two Canadian studies (TDSB, and Durham Region study in Ontario) that have examined the persistence of these positive impacts have demonstrated that these improvements in both knowledge and stigma have been sustained over time. This finding to our knowledge has never before been demonstrated in this population for any specific standalone knowledge or stigma intervention. And, these findings are similar for both teachers and students, a finding which also has never been identified in any other Canadian school mental health intervention. Finally, one study (a randomized controlled trial in the Ottawa region) that compared the application of the Guide against that of an existing Ontario curriculum reported significantly better outcomes (knowledge and stigma) among students who received the Guide compared to those receiving the Ontario mental health curriculum. This study also showed the Guide’s positive impact on help-seeking intentions in students receiving the Guide intervention.

In addition, similarly positive robust results have been found in the early data analysis of ongoing studies (British Columbia) of pre-service teacher trainees and in a large cohort of teachers from three different school boards in Alberta. Further independent studies are also ongoing in the Province of Manitoba and are being planned for other Canadian jurisdictions.



Currently, the Guide (version 1.1) and all its attendant teacher self-study and classroom ready materials (six modules) are available through the web-site www.teenmentalhealth.org/curriculum. The teacher training in the classroom application of the resource is conducted through teacher trainer groups embedded in either school boards (such as in the Province of NS) or in a Provincial team (such as in the Province of Manitoba). These teams receive a two-day train-the-trainer session from Dr. Kutcher and his team. Once local training teams are established, they provide a one day training on the classroom application of the Guide to teachers, usually during existing Professional Development (PD) days. This has proven to be an efficient and inexpensive method for scaling out the intervention across large educational systems. However, it is limited by trainer availability and is constrained by PD day schedules.

To date, to our knowledge, over 3000 schools in numerous Provinces (BC; AB; SK; MB; ON; NB; NS) have been applying the Guide. Two Provinces (NS, MB) are moving to fully embed the Guide and its teacher training programs and jurisdictions in three other Provinces and one Territory have initiated discussions to explore a similar opportunity.

Over the two years, Dr. Kutcher and his team have been conducting a semi-structured formative evaluation of the Guide materials and the classroom application of the Guide. The information collected from teachers and trainers has led to the development of a “Chair Certified Resources” (CCR) team of educators, students, parents and mental health professionals whose job is to vet potential mental health literacy resources for their accuracy and pedagogic suitability for classroom use. This resource list will be made freely available to all Canadian educators by December 2015/January 2016 and some of its components will be added to the on-line teacher resources that support the classroom application of the Guide. Additionally, these data have been used to update the Guide and classroom ready modules to the current version (1.1), which has as of June 18, 2015 been made available to all educators on the web-site www.teenmentalhealth.org/curriculum.



Table 1: Short Summary of Canadian data on Guide implementation outcomes

The asterisk * in the table below signifies results obtained in follow-up of 2 – 3 months duration. This indicates that the outcomes last over time – to our knowledge the only mental health literacy classroom resource application studies to have demonstrated reliability of this finding for both knowledge improvement and stigma reduction.

Province	Study type	Year	Participants	Increased Knowledge		Improved Attitudes		Improved help-seeking	
				Yes		Yes		Yes	
Nova Scotia	Program evaluation	2012-2013	218 Educators	Yes	p<0.0001, d=1.85	Yes	p<0.0001, d=0.51		
Ontario	RCT	2011-2012	362 Students	Yes	p=0.0001, d=0.46	Yes	p=0.0001, d=0.30	Yes	p=0.01; d=0.18
	Cross-sectional study	2012	409 Students	Yes	p<0.001, d=0.9; p<0.001*, d=0.73*	Yes	p<0.001, d=0.25; p<0.007*, d=0.18*		
	Program evaluation	2013	74 Educators	Yes	p<0.001, d=1.48	Yes	p<0.03, d=1.26		
	Cross-sectional study	2013	175 Students	Yes	p<0.0001, d=1.11; p<0.001*, d=0.91*	Yes	p<0.001, d=0.66; p<0.001*, d=0.52*		
Alberta	Program evaluation	2013	325 Educators	Yes	p<0.0001, d=2.03	Yes?	NS, d=0.21		
British Columbia	Program evaluation	2015	43 Educators	Yes	p<.001, d=2.40	Yes	p=.002, d = .55		
	Cross-sectional study	2015	60 Pre-service teachers	Yes	p<.001, d=2.30; <i>In Progress</i>	Yes	p<.001, d=.90; <i>In Progress</i>		
Manitoba	RCT	2013-ongoing							

“Go-To” Training:

To further facilitate the pathway to youth mental health care it is necessary to enhance institutional capacity within junior-high and secondary school settings to identify, triage, refer and support youth at high risk of having a mental disorder. My team and I have created a unique and innovative training program designed to strengthen the competencies of teachers and student services providers by building on the observation that every school has educators whom students “go to” when they have a problem. By providing these existing “Go To” Educators with the competencies for identification, triage, referral and support youth can have the wide gamut of their mental health support and care needs met. Because this training is provided to educators and local health/mental health care providers concurrently, its impact goes well beyond the usually expected improvements in knowledge and stigma reduction to enhance collaboration between education and health sectors, advancing improved access to needed assessment and care for young people.



The results of this intervention have been studied in a number of different provinces in Canada, with highly positive results in each setting reported (see table 2). Additional studies in other Provinces are also currently underway (for example in Alberta over 1500 teachers have been trained to date).

Table 2: Summary of “Go To” Educator studies in various Canadian Provinces

Province	Study type	Year	Participants	Increased Knowledge		Improved Attitudes	
				Yes		Yes	
Nova Scotia	Program evaluation	2012-2013	120 “Go-to” Educators	Yes	p<0.001, d=2.48	Yes	p≤0.001, d=0.37
Ontario	Program evaluation	2013	244 “Go-to” Educators	Yes	p<0.001, d=1.90	Yes	NS – median analysis VERY ROBUST
Manitoba	Program evaluation	2013	31 “Go-to” Educators*	Yes	p<0.001, d=2.19	Yes	p<0.001, d=0.68
Alberta	Program evaluation	2014	363 “Go-to” educators	Yes	P<0.001, d=2.4	Yes	p<0.001, d=0.19

Recently the “Go To” training has been implemented through the leadership of the Alberta Mental Health Services in Calgary, within both the Public and Catholic Boards. Data linking participant schools to local child and youth mental health services demonstrates a 2 to 2.5 **fold** increase in access to mental health and addictions care for youth in schools into which the training was integrated compared to those whose staff had yet not been trained (figure 3). As of June 2016, over 1600 teachers and other school staff have been trained.

Figure 3: CAAMHPP* Referral Rates By School Training Status

Training Type	Schools	Referrals	Referrals Rate
Schools yet to be trained	235	1673	7.19
Schools with some staff trained	50	838	16.76
Schools with the entire staff trained	26	466	17.92

*Child & Adolescent Addictions and Mental Health Programs & Psychiatry (Calgary Alberta)



Transitions Resource for Post-Secondary Education Settings:

Because the approach to meet youth mental health needs on campus is very different than that developed for junior high and secondary school, my team and I have developed a unique and innovative resource called Transitions designed to enhance mental health knowledge, decrease stigma and enhance help-seeking efficacy in this population. The second edition of Transitions is available in hard copy monograph; passport sized monograph; e-book and application for the i-phone. Transitions integrates mental health literacy into a life-skills resource that can be used to help students move from secondary to post-secondary schooling. To my knowledge Transitions is the only globally available evidence based resource that has been shown to improve mental health knowledge, decrease stigma and enhance help-seeking efficacy on campus (see table 4).

Table 4: Impact of Transitions on Campus: the Dalhousie University Study

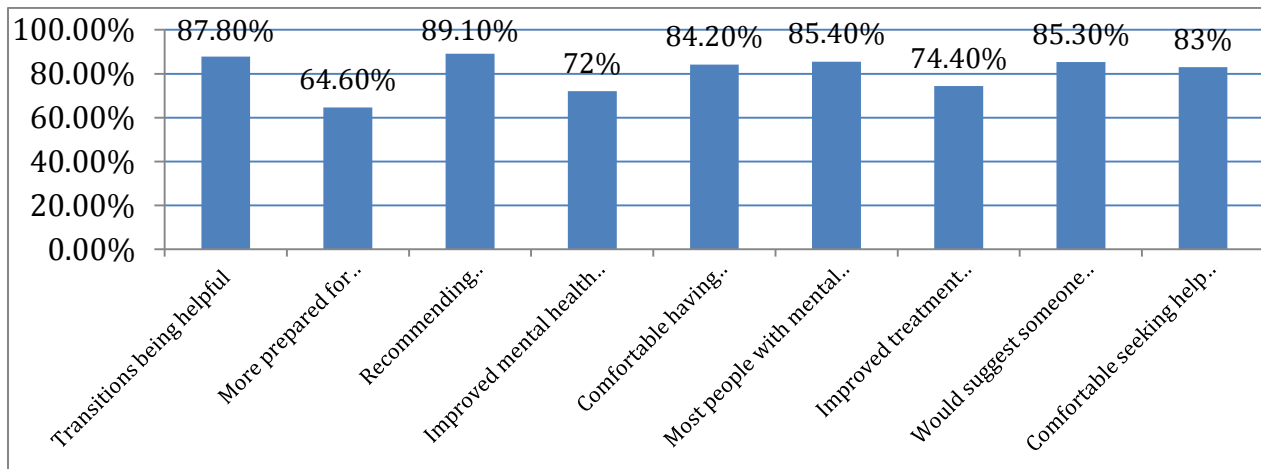
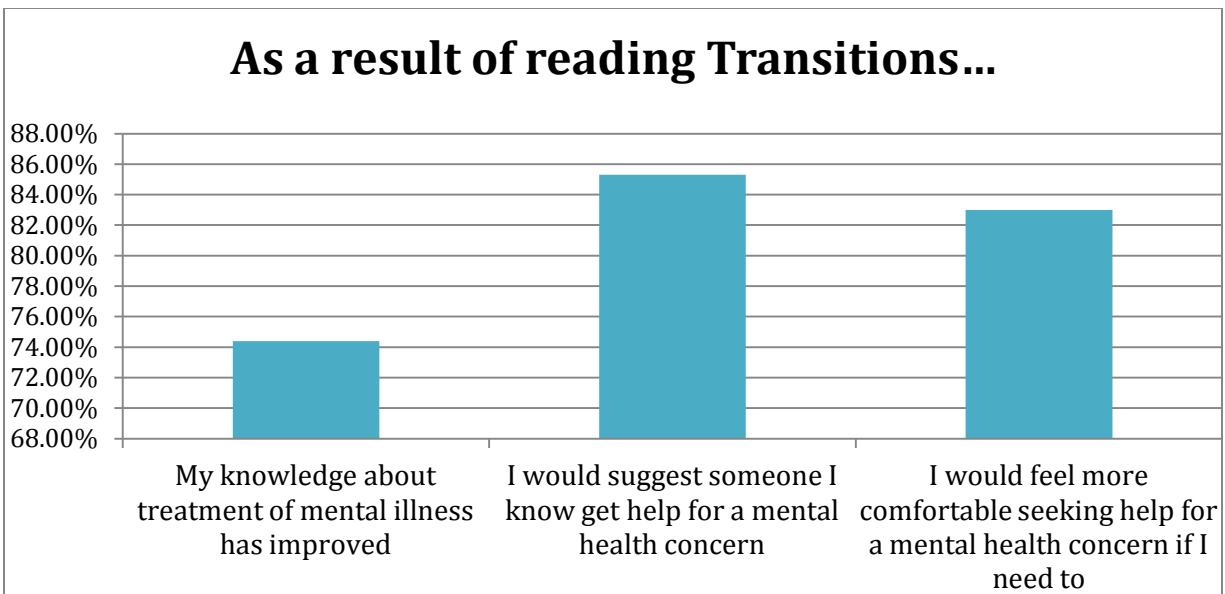


Table 4: Impact on Mental Health Literacy: the Dalhousie University Study

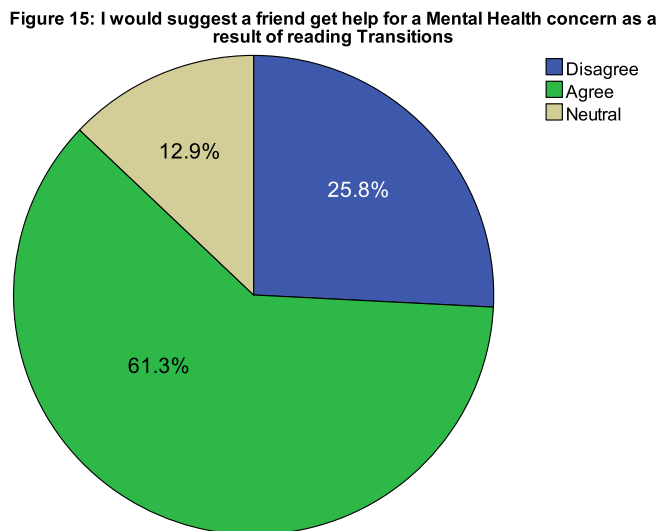
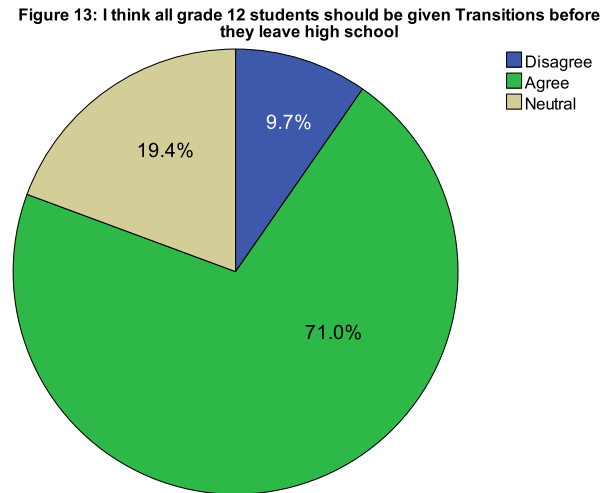
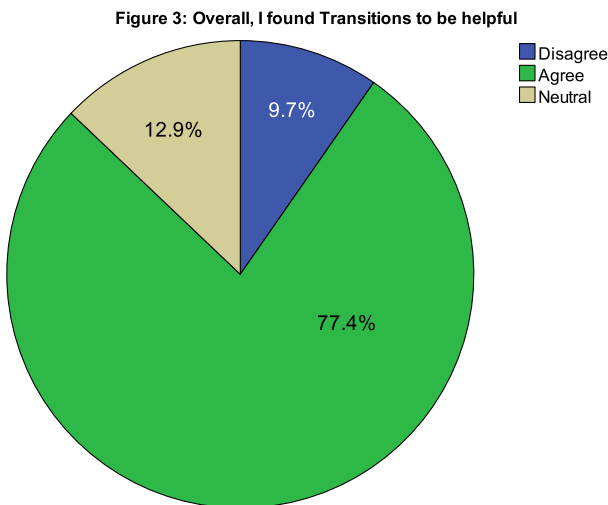




Two prospective cohort studies regarding Transitions are either underway now or planned to begin in early 2016 at two other Canadian universities.

Additionally, a grade 12 version of Transitions is currently under development. This is being conducted in collaboration with the Nova Scotia Department of Education. An initial field study conducted in three NS secondary schools has already demonstrated the value of the current version of Transitions (see figure 4) and an on-line educational resource is being created to support the national distribution of this new material.

**Figure 4: Preliminary Results of Transitions in Grade 12 Classrooms:
KNOW BEFORE YOU GO**



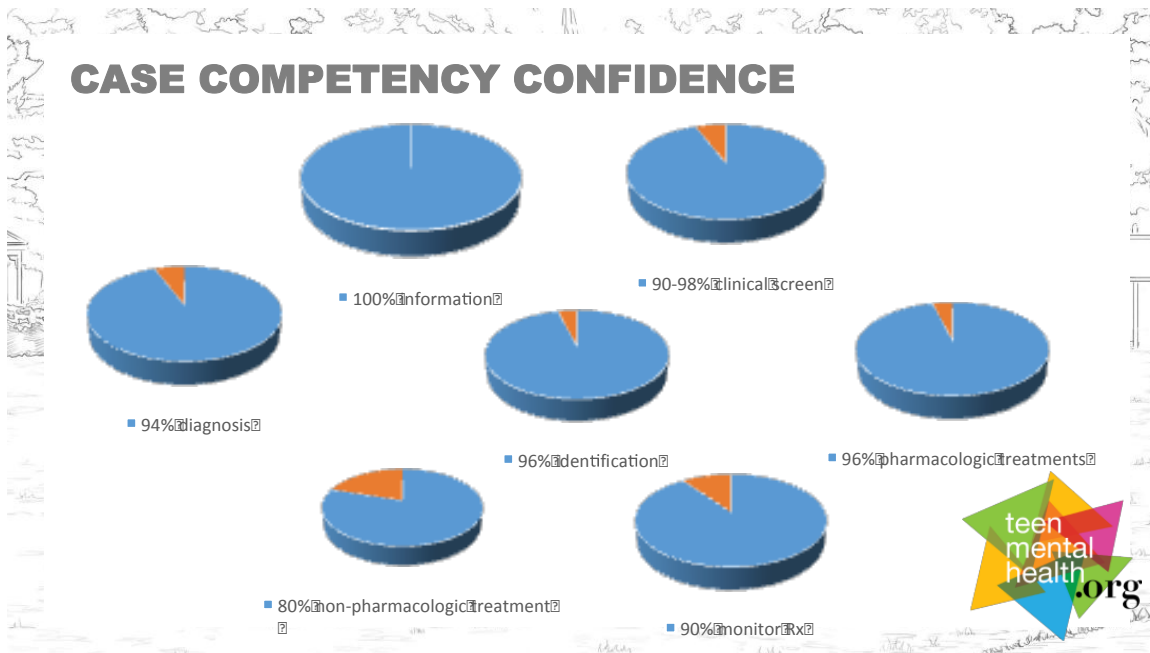


Primary Care Youth Mental Health Care Competency Development:

Numerous young people with high volume but low acuity mental disorders and various mental health problems can receive effective treatment in primary care if the necessary competencies were available therein. Not only does this provide rapid access to effective treatment for the majority of young people who need it, but it also decreases impact on emergency room visits and decants this population from specialty mental health services, thus increasing availability of those services for youth with low volume high intensity needs.

In collaboration with other partners, we have created a comprehensive and innovative primary care youth mental health care training program for primary care health providers (in collaboration with the PSP of the British Columbia Medical Association). This program is now being rolled out across BC with to date about 1/2 of all primary care physicians having been trained. The results (see figure 5) have demonstrated positive impacts in enhancing primary care provider competencies.

Figure 5: Enhanced Primary Care Provider Competencies: BC Training



This intervention continues to be rolled out across BC and is being considered for application in other Canadian provinces as well. Additionally, this work has been advanced through the Sandbox Project and in collaboration with Telus I have developed a complete electronically based primary care located youth mental health care intervention support platform that is now being field tested at Queens University in Kingston.



International Work:

This work has been adapted, modified and implemented internationally in many different countries. Projects are underway in: Brazil; China; Panama; Nicaragua, Guatemala; Portugal and under development in UK; Austria; Ireland; Norway; Finland. In addition, the integrated schools/health provision for improving youth mental health Depression outcomes is underway in Malawi and Tanzania funded by Grand Challenges Canada.

For an example of this work check out these links:

<https://www.youtube.com/watch?v=-82w0qPTTcc>

<https://www.youtube.com/watch?v=6aJUsMDd3Ac>

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Appendix A: School Mental Health Literacy Publications

Books

Wright, L. & Kutcher, S. (2016). Adolescent Brain Development. Colloquium Series on The Developing Brain. doi:10.4199/C00133ED1V01Y201602DBR012

Kutcher S, Wei Y, Weist M. Global School Mental Health: considerations and future directions. In S. Kutcher, Y. Wei and M. Weist (eds) Global School Mental Health. Cambridge University Press. Cambridge, UK. 2015.

Book Chapters

Kutcher, S., Wei, Y., & Hashish, M. (in press 2016). Mental Health Literacy for Students and Teachers: A “School Friendly” Approach. In M. Hodes (Ed), Positive Mental Health for Children and Adolescents.

Wei Y, Kutcher S, Blackwood A, Glover D, et al. A collaborative and sustainable approach to address mental health promotion and early identification in schools in the Canadian province of Nova Scotia and beyond. In S Kutcher, Y. Wei and M. Weist (eds) Global School Mental Health. Cambridge University Press, Cambridge, UK. 2015

Journal Articles

Kutcher, S., Wei, Y., Gilberds, H., Brown, A., Ubuguyu, O., Njau, T., Sabuni, N., Magimba, A., & Perkins, K. (submitted May 2016). Journal of Depression and Anxiety.

Kutcher, S., Wei, Y., Gilberds, H., Brown, A., Ubuguyu, O., Njau, T., Sabuni, N., Magimba, A., & Perkins, K. (submitted April 2016). Improving Tanzanian Teachers’ Mental Health Knowledge, Decreasing Stigma and Furthering Help-Seeking Efficacy: A School Mental Health Literacy Curriculum Resource Training Approach. International Journal of Mental Health Systems.

Kutcher, S., Wei, Y., & Behzadi, P. (submitted 2016). School and Community Based Youth Suicide Prevention Interventions: Hot Idea, Hot Air or Sham? The Canadian Journal of Psychiatry/La Revue canadienne de psychiatrie.

Kutcher, S., Gilberds, H., Heisler, C., Udedi, M., & Perkins, K. (submitted 2016). Malawi primary health care worker youth depression competency development: A first field report of an ongoing program evaluation. BMC Psychiatry.

Kutcher, S., Wei, Y., Costa, S., Gusmão, R., Skokauskas, N., & Sourander, A. (2016). Enhancing Mental Health Literacy in Young People [Editorial]. European Child and Adolescent Psychiatry.

Miln, R., Kutcher, S., Lewis, S.P., Walker, S., Wei, Y., Ferrill, N., & Armstrong, M.A. (2016). Impact of a Mental Health Curriculum for High School Students on Knowledge and Stigma Among High School Students: A Randomized Controlled Trial. Journal of the American Academy of Child and Adolescent Psychiatry, 55 (5), 383-391.



Kutcher, S., Wei, Y., & Coniglio, C. (2016). Mental Health Literacy: Past, Present and Future. *The Canadian Journal of Psychiatry*, 61 (3), 154-158.

Milin, R., Kutcher, S., Lewis, S.P., Walker, S., Wei, Y., Ferrill, N., & Armstrong, M.A. (submitted 2015). Impact of a Mental Health Curriculum for High School Students on Knowledge and Stigma: A Randomized Controlled Trial. *Journal of the American Academy of Child and Adolescent Psychiatry*.

Kutcher, S., Wei, Y., & Morgan, C. Evaluation of Transitions Mental Health Literacy Embedded into Life Skills Resource for Postsecondary Students. (2015 May)

Wei, Y., McGrath, P., Hayden, J., & Kutcher, S. (2015). Mental health literacy measures evaluating knowledge, attitudes and help-seeking: A scoping review. *BMC Psychiatry*, 15 (1), 291.

Kutcher, S., Gilberds, H., Morgan, C., Udedi, M., & Perkins, K. (2015). Malawi Educators' Assessment of Student Mental Health Outcomes. *International Journal of School and Cognitive Psychology*, SC2:009.

Kutcher, S., Wei, Y., & Morgan, C. (2015). Successful Application of a Canadian Mental Health Curriculum Resource by Usual Classroom Teachers in Significantly and Sustainably Improving Student Mental Health Literacy. *The Canadian Journal of Psychiatry/La Revue canadienne de psychiatrie*, 60 (12) 580-586.

Kutcher, S., Bagnell, A., & Wei, Y. (2015). Mental health literacy in secondary schools: a Canadian approach. *Child and Adolescent Psychiatric Clinics of North America* 24(2):233-244

Milen, R., Kutcher, S. et al, A Randomized Controlled Trial of a School-based Mental Health Literacy Intervention for Youth: Impact on knowledge, attitudes and help-seeking efficacy (poster presented at the American Psychiatric Association Annual Meeting, 2013).

McLuckie, A., Kutcher, S., Wei, Y., & Weaver, C. (2014). Sustained improvements in students' mental health literacy with use of a mental health curriculum in Canadian schools. *BMC Psychiatry* 14(1):1694.

Wei, Y., Kutcher, S., Hines, H., MacKay, A. (2013). Successfully embedding mental health literacy into Canadian classroom curriculum by building on existing educator competencies and school structures: the Mental Health and High School Curriculum Guide for secondary schools in Nova Scotia. *Literacy Information and Computer Education Journal (LICEJ)*, 5 (3):1158-1163.



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Wei Y., & Kutcher, S. Innovations in practice: “Go-To” educator training on the mental health competencies of educators in the secondary school setting: a program evaluation. *Child and Adolescent Mental Health*. Doi: 10.1111/camh.12056. 2014; 19(3) 219-222.

Wei, Y., Hayden, J., Kutcher, S., Zygmunt, A., McGrath, P. The Effectiveness of School Mental Health Literacy Programs to Address Knowledge, Attitudes, and Help-Seeking among Youth: A Systematic Review. *Early Intervention in Psychiatry*. 2013 May; 7(2): 109-21.

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Wei, Y., Kutcher, S. International school mental health: global approaches, global challenges, and global opportunities. *Child Adolesc Psychiatr Clin N Am*. 2011 Jan; 102(1): 11-27.