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**• MENTAL HEALTH SERVICES IN THE COURTS: A PROGRAM REVIEW •**

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Programs designed to divert individuals with mental illnesses and/or substance abuse disorders from the criminal justice system began to emerge in the United States in the 1970s.<sup>1</sup> Since that time, such programs have steadily increased in number and scope. However, empirical evidence as to the effectiveness of these programs is just beginning to emerge.<sup>2</sup> Most early diversion programs involved individuals with mental illnesses and/or substance abuse disorders who had been charged with relatively minor, non-violent offences. These programs were intended to divert these individuals away from criminal prosecution and incarceration, both because such criminal justice involvement was more costly to the system and because such diversion was seen to be a benefit to the accused person. While many diversion programs continue to focus primarily on such low-risk individuals, recent work by Naples and Steadman suggests that individuals with violent charges can be included in diversion programs with no increased risk to the community.<sup>3</sup>

There is currently no definitive model for organizing mental health diversion programs.<sup>4</sup> James described the problems associated with the development of diversion services in England and Wales.<sup>5</sup> Factors such as lack of strategic planning and coordination, poor program design, lack of operational policies, ineffective interagency collaboration, patchy geographic availability, lack of coherent structure, inadequate resources and lack of quality evaluation processes hindered the establishment of a coherent and effective system of diversion and treatment services. The result was that 150 diversion services established in the UK now represent a wide range of models, many of which are still described as experimental or pilot in nature.

Although a single blueprint for diversion programs would not suit all geographical locations or legal jurisdictions, several elements have been recognized as contributing to the successful implementation of such programs including: (1) ensuring that all relevant parties are involved in the initial devel-

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opment of the program; (2) holding regular meetings with all key parties; (3) integrating the various elements of the program, including elements from different parts of the larger criminal justice and mental health systems; (4) ensuring there is strong and clearly identified leadership; (5) utilizing non-traditional case management strategies; (6) securing protected funding including dedicated administrative resources; (7) establishing mental health services in courts as a core part of a general mental health delivery system; (8) ensuring timely access to adequate community and hospital services; and (9) utilizing multidisciplinary clinical teams including psychiatrists.<sup>6</sup>

A relatively recent approach to diversion has been the development of the specialized mental health court. The first comprehensive description of four U.S. mental health courts concluded that there was no common model for such courts. Rather, they appeared to employ a hybrid of drug court principles applied in the context of existing community-based mental health services.<sup>7</sup> While mental health courts, in both concept and practice, have met with generally enthusiastic acceptance, Steadman, Davidson, and Brown have encouraged a more cautious perspective. According to these authors, the mental health court as an entity has “a very brief history, an unclear conceptual model, and unproven effectiveness”.<sup>8</sup>

Nevertheless, empirical studies on the effectiveness of mental health courts have begun to appear in the literature and seem to indicate that mental health courts have had a positive impact on a number of mental health and criminal justice-related indicators.<sup>9</sup> Specifically, participants have shown improvements in independent living skills and reduced drug use compared with those assigned to a “treatment as usual” group,<sup>10</sup> and involvement with the mental health court resulted in an increased likelihood of receiving mental health treatment.<sup>11</sup> Importantly, however, these authors caution that “the jury is still out regarding the impact of this treatment on defendants’ mental health status or whether it reduces the likelihood of re-arrest and return to jail”.<sup>12</sup>

Despite the lack of a well-developed and articulated conceptual framework and with only limited empirical evidence supporting mental health courts, enthusiasm and support for mental health courts has continued.<sup>13</sup> Since the year 2000, millions of dollars have been allocated to the development and implementation of mental health courts in the United States, leading to a proliferation of such programs.<sup>14</sup>

In Canada, funding initiatives have been more modest, and the initiatives have focused on court diversion. The present article describes the history and development of mental health services in the courts in Toronto, Canada. Consistent with the ex-

periences of other diversion programs reported on in the literature, this program evolved out of a perceived need for mental health services in the court, but experienced growing pains associated with lack of clear leadership and integration of all key stakeholders in its early years. A review of services undertaken by an external consulting group resulted in a set of recommendations that have led to significant improvement in leadership, accountability, and program structure.

Toronto is Canada's largest city with a population of approximately 2.5 million. For many years, the delivery of lower criminal court services has been provided within five distinct courthouses each serving a different geographical region of Toronto. Two of the courts are situated in the downtown city core, while the other three courts are situated in more suburban settings. The largest downtown court processes the highest number of mentally disordered offenders on an annual basis.

In 1995, with support and funding from the Ontario Ministry of Health and Long-Term Care, several community mental health agencies began to assign front line staff to these five courthouses. The original intent of these court-based mental health services was to serve individuals with a serious mental illness who had been charged with non-violent criminal offences by diverting them from the criminal justice system to the health care system. Many of these individuals were being held in custody and had not yet entered a plea before the courts. In the intervening years, consistent with developments in other jurisdictions described above, these agencies have expanded services to include consultation and support to persons who were charged with more serious or violent offences. While these individuals could not be diverted due to the nature of their charges and/or their criminal history, mental health services included continuing outpatient care after their criminal case has been adjudicated when they had been released into the community.

In 1997, these agencies started meeting informally as a group that came to be known as the Mental Health Court Support Network. The initial purpose of these meetings was to develop common protocols and to share knowledge and experiences. It also developed a common data collection tool and a Memorandum of Understanding that was flexible as it applied to the individual courthouses. The Network organized and facilitated a workshop for other Ontario mental health agencies that were beginning to provide similar services in other cities in the province. By early 2002, five community mental health agencies were providing a range of services in the Toronto courts, and all five Toronto courthouses had some level of court support services. The current

budget for these services totals approximately \$1.2 million (US) annually.

In early 1998, another initiative was begun. A small group of judges in the larger downtown court sought to establish a formal Mental Health Court that would focus solely on people with mental health problems, particularly those for whom there was a question of fitness to stand trial. As noted by Schneider,<sup>15</sup> the impetus for this dedicated Mental Health Court included the following factors: the perception of an increased number of mentally disordered accused in the criminal justice system; the inability of the "regular" courts to provide an appropriate response to this population; the slow processing of these cases (many remands); and the large number of these cases that the judges felt would be dealt with more effectively by the mental health service system rather than the criminal justice system. This initiative resulted in the establishment of Toronto's Mental Health Court, joining the Drug Court as a specialized court located within the larger downtown courthouse. While no new funding had been made available, the Mental Health Court was the result of a re-alignment of existing resources by the judiciary, the Ministry of the Attorney General, the Ministry of Health and Long-Term Care, and the Centre for Addiction and Mental Health (CAMH). In the Toronto Mental Health Court, prosecuting attorneys, duty counsel, judges and court staff became specialized in relevant areas of mental health and mental health law. In addition, forensic psychiatrists under contract with CAMH were in attendance on a daily basis for the purpose of assessment and giving evidence.

In February 2002, unexpectedly, Toronto's Senior Administrative Judge, at the urging of the judiciary in the Mental Health Court, signalled her intention to transfer all of the in-custody mental health criminal cases in the city to the specialized Mental Health Court. Included in this announcement was the expressed expectation that mental health services from all other courthouses would be transferred downtown to the Mental Health Court. This announcement was made prior to any consultation with the provider agencies or relevant government ministries. In response, the provider agencies proposed that an operational review of the court-based mental health services be conducted as a means to examine the feasibility and impact of centralization. External consultants were retained to conduct the review. Apart from examining the central issue of centralization, the operational review was also required to: (1) describe the current services and client population, (2) analyze the strengths and challenges of the current delivery structure and the opportunities for improvement,

and (3) explore a number of other key program dimensions including interagency relationships.

## METHOD

A multidimensional approach to data collection was used for the review. In addition to a focused literature review, the client data collected by the service providers was analyzed, and semi-structured interviews were conducted with representatives of each of the key stakeholder groups in each of the five courthouses (including judges, crown [prosecuting] attorneys, defence/duty counsel, mental health agency managers and court workers), with a senior representative of each of the four relevant provincial ministries, and with key researchers in the United States. Focus groups were also held with a non-random sample of consumers and family members. Finally, service-related policy and procedure manuals were reviewed, as were documents describing the status of provincial policy related to services for this population.

## RESULTS

### CLIENT DATA

As a matter of routine, mental health workers in the courts completed a two-page "Intake Information" form for every client participating in the program. This form was aimed at obtaining some basic descriptive information on the type of clients using the services and was an important first attempt at collecting standardized data. However, there were numerous limitations to the use of this form including the lack of consistent methods of documentation within and across courthouses, use of non-specific categories that did not capture information required for in-depth analyses, lack of data gathered on many elements important for evaluation and service review (e.g., ethnicity and client outcome data), and coding issues including duplicates in the data set (*i.e.*, the same case being coded twice). Another important limitation was that there was a large amount of missing data. These limitations required a note of caution when the consultants attempted to draw conclusions from these data and their analyses. However, the following results and conclusions seemed justified despite limitations in the data set.

There were a total of 2361 case referrals across the courthouses during the 2001/2002 fiscal year. Most (61.6%) were seen in the Mental Health Court. The majority of referrals were male (73.8%). The mean client age was 38.2 years, though clients in the suburban courthouses were younger.

Clients spent an average of just over two months (66.7 days) involved with the various mental health

services, but length of time varied significantly across courthouses. The number of clients with "no fixed address" (assumed to be a proxy measure of homelessness) differed significantly across courthouses; the Mental Health Court had higher levels of "no fixed address" than the suburban courthouses. Most cases across courthouses reported income source as "Unknown" (23.9%), "Ontario Disability Support Program (ODSP)" (22.5%) or "None" (15.7%).

Initial contact with the majority of cases (79.4%) occurred while the client was in custody, although the proportion varied significantly across courthouses, with a higher percentage of in-custody cases in the Mental Health Court. It was noted that if all of the in-custody cases were transferred from the other courthouses to the Mental Health Court, as proposed by the Mental Health Court judges, more than a two-fold increase in the number of cases appearing in the Mental Health Court would occur (*e.g.*, the total volume of cases at the Mental Health Court would have increased from 888 cases to 1848 cases during that time period).

Approximately 40 per cent of the cases were assessed for fitness to stand trial. Significantly more males received fitness assessments than females (44.3% vs. 28.9%). It was further noted that if all in-custody fitness assessments were moved to the Mental Health Court, there would be a 25 per cent increase from current levels (*e.g.*, the total number of fitness assessments at Court 102 would have increased from 731 to 915 during that time period).

The majority of clients (69.8%) referred for a fitness assessment were found "fit". The proportion of cases found "fit" did not depend on the initial custody status of the case, but was significantly related to the court where the assessment took place, with the downtown Mental Health Court having the highest proportion. Assessment outcome was not significantly related to gender, but there was a trend toward females being found "not fit" more often than males (34.6% vs. 25.9%).

For the purpose of these analyses, a three-point "charge severity" index was created using the offence class designations (Class One — least severe, *e.g.*, Theft Under, Mischief Under; Class Two — moderately severe, *e.g.*, Simple Assault, Break and Enter; or Class Three — most severe, *e.g.*, Assault with a Weapon, Sexual Assault). The index was based on the most severe charge for each case. Most cases using mental health services had a charge severity index of Class Two (51.8%). The remaining cases were almost equally divided into Class One (22.4%) or Class Three (25.7%) offences.

Where provisional diagnoses were listed (70% of cases), the four most frequent diagnoses were: schizophrenia (27.2%); substance abuse (23.3%);

depression (13.5%); and bipolar affective disorder (8.7%). Cases with a provisional diagnosis of schizophrenia were more likely to be found unfit to stand trial.

A total of 1332 referrals for further mental health services were made for 2310 cases. This referral rate seemed surprisingly low given the service goals (diversion), although it was possible this was due to missing data and/or reporting inconsistencies within and across courthouses. This result further emphasized the need for an improved data collection system and standard training in data acquisition for all workers.

#### CLIENT/FAMILY FOCUS GROUPS

Three focus groups were held involving a total of 25 individuals, primarily clients of the mental health services in the courts. Participants reported that they received a wide variety of services from mental health staff. There was unanimity that these services were very valuable and several reasons were offered: workers were on-site and therefore accessible; mental health support staff were familiar with both the mental health and court systems; and, these services help with community reintegration.

As implied above, all participants, when asked, reported that the services they or their family members received should be available in the local courthouses. A number of suggestions were made for improvements in the service. It was suggested that the services were not well-known and that steps should be taken to increase awareness in the general public. It was suggested that court staff (including prosecuting attorneys and judges) required better education and information about the mental health system. It was a common message that the numbers of mental health staff working in the courts were insufficient. Finally, there was a consensus that communication between court support staff and external mental health services needed to be improved.

#### MENTAL HEALTH STAFF AND COURT OFFICIAL INTERVIEWS

Of the 77 individuals invited to participate, 72 were interviewed, almost all in person and in their work settings. Although initially focused on the post-charge diversion of mentally ill offenders from conviction or incarceration, interviewees reported that the functions of the mental health staff have, over time, broadened considerably, largely in response to the perceived needs of the individual courthouses rather than as part of any proactive or strategic program plan. Staff in all five courthouses conducted assessments for (1) fitness, (2) civil certification, (3) bail (except in the Mental Health Court),

and (4) diversion. Additionally, they were actively involved in the development of diversion plans. Staff in three courthouses conducted assessments to assist the court in sentencing. Four of the five courthouses also facilitated the access to court-ordered inpatient assessments and negotiated the early return to court once clients in hospital were deemed fit to stand trial. Staff in all courthouses recommended terms for bail/release, and in all but one recommended terms of probation orders. All staff regularly consulted/interacted with prosecuting attorneys and defence/duty counsel, and provided information and support to families. All front line staff participated in case management of clients using a brokerage model. Staffing in three of the five courthouses provided intensive case management to support the implementation of the diversion plan. Psychiatric staff in four courthouses provided short-term treatment/follow-up. Services were provided to mentally disordered individuals charged with a broad spectrum of offences, ranging from mischief to murder.

Respondents identified a number of aspects of the services that were in need of improvement. These included: (1) the need for forensic psychiatrists to be in attendance more regularly in the suburban courthouses; (2) more timely access to mental health services in the community and hospitals (particularly assistance in finding housing, case management, ACT teams, community psychiatrists, inpatient beds and forensic assessment beds); and (3) enhanced mental health staffing in some courthouses.

Responses indicated that the target population for these services had changed over time. Initially, the services were conceived as being focused primarily on individuals with serious mental illness (psychosis) charged with relatively minor, non-violent offences. At the time of the review, the view of most respondents was that the focus should be on accused persons with mental health problems more broadly defined (including substance abuse and personality disorder), and that the severity of the charge should not be the critical factor in determining eligibility for service. Respondents made other important observations concerning the population being served. They noted that a majority of the accused had not been previously diagnosed. They noted that many of the accused had a complex set of problems (multiple diagnoses combined with a broad spectrum of social problems such as lack of housing, employment, family or social support). Finally, respondents noted that the population was very diverse in their ethnic and racial backgrounds. For many, English was a second language.

When asked about the primary goal(s) of these mental health services, most respondents identified one of the following two: to link mentally ill offenders with needed mental health and social ser-

vices to reduce criminalization/recidivism; or, to triage mentally ill accused out of the criminal justice system into the mental health system. And, the vast majority of respondents believed that these mental health services in the courts were generally achieving some important benefit(s) for clients. Some respondents, however, pointed to the lack of documentary evidence to support this belief, while many others noted the need for better access to a range of community and hospital services to improve service effectiveness. Despite the latter, the services were viewed by almost all respondents as having many strengths, the most frequently noted being the high quality of the mental health staff who were described as being flexible, responsive, compassionate, sensitive, competent, and committed. Frequently mentioned was the staff knowledge of their local community services, their development of informal networks of service providers in the local community, and their ability to link clients to services "close to home" in their own communities. Emphasis was placed on the fact that services based on the courthouse site facilitated timely access to service.

One of the key questions at issue in the review related to the nature of the relationship(s) among the agencies providing mental health services to the five courthouses. Although the agencies were reported at some time in the past to be functioning as an informal network, there was little evidence during the review to conclude that there was any systematic coordination or planning of the delivery of services. Many respondents described the history of the provider agencies as being more competitive than collaborative, and the agencies were described as following different service philosophies. These differing service philosophies were contrasted more clearly when more than one provider agency was located in the same courthouse. There was strong agreement among respondents that more communication, more information sharing, more coordination, more collaboration, and perhaps more integration was required across provider agencies. Some respondents noted that the loose network of provider agencies had no mechanisms for accountability, program development, quality improvement or performance measurement. There was a strong feeling expressed that this lack of structure had exacerbated tensions across provider agencies and between these agencies and the host courthouses. There were also opinions expressed that the more competitive-than-collaborative relationship among these agencies has also likely reduced their ability to advocate effectively for new resources from relevant funding sources.

A review of the service provider agency policies and procedures (contained in service manuals) was

undertaken. The procedures described in the documents varied considerably. They were most similar regarding service goals, diversion procedures, general target population and client consent. The most variation related to the definition of the specific target population and the role of the mental health worker. Surprisingly, issues of accountability, privacy, and confidentiality were either absent or inconsistent.

In summary, the majority view was that the mental health services provided in the courts should be rooted in a common vision and set of values, supported by consistent operational policies and procedures, and aided by a comprehensive database that would provide a reliable basis for ongoing service monitoring and outcome evaluation.

#### REVIEW RECOMMENDATIONS

The most important recommendation of the review was that the mental health services in the Toronto courts should be integrated into one program, with a well-articulated vision, mission/mandate and values including a definition of target population and range of services and with common operational policies and procedures. The review also recommended that there be a clear accountability framework for the new integrated program.

The review identified four optional approaches to governing and managing such an integrated program: (1) a loose, informal network of agencies each of which is fully autonomous both in terms of governance and management, and in which cooperation occurs on an *ad hoc* basis (or not at all); (2) a formal partnership of agencies that is formally created to jointly govern and manage an integrated program, an arrangement in which some individual agency autonomy would be given up in the interests of the larger enterprise (*i.e.*, the program); (3) a formal network as above which performs the governance function but one in which one agency has the lead responsibility for managing the integrated program; and (4) a single merged or newly created organization which is responsible both for governing and managing the integrated program. The reviewers noted that the first of these approaches was a reflection of the status quo and rejected it as inadequate to the program's needs. Each of the other three options were noted to have advantages and disadvantages, while all were believed to have significant advantages and no disadvantages over the current arrangement. While the consultants favoured the third option, it was recommended that the executive directors of the provider agencies explore the potential for integration of mental health court support services and critically examine the identified optional governance and management models.

With respect to the issue of centralization of all in-custody mental health cases in the Mental Health Court, the review cited the unanimous opinion regarding the importance of on-site services in each of the courts to provide timely and individualized service, and the importance of the informal local networks of service providers that facilitate diversion and post-adjudication access to mental health services in the client's home community. These views seemed to argue against the kind of centralization of mental health services that was being contemplated by the judges. In addition, there was significant opposition to centralization among the judiciary in the suburban courts, who clearly expressed a preference for keeping local mental health cases in their courtrooms.

#### BROADER AND LONGER-TERM EFFECTS OF THE REVIEW

The provider agencies that participated in this review agreed to take the review findings and use them as the foundation for planning the next three to five years of mental health services in the five Toronto courthouses. That work has now been underway for approximately 18 months. To date, some significant steps have been taken. After a month of the review being tabled, the provider agencies agreed to formally establish the Mental Health Court Support Consortium as a formal network of agencies providing an integrated program. A statement of vision and mission for the program was developed along with a Memorandum of Understanding (MOU) regarding governance and leadership. The member agencies agreed to review the MOU and Consortium activities at least annually, and are committed to making structural changes if the current collaborative approach prevents the Consortium from achieving its mission. The leads of the member agencies have also developed a collegial relationship and meet regularly. One of the agencies is currently providing administrative support. The Consortium plans to develop a quality improvement process and conduct research, training and program evaluation.

For the first year of operation, a work plan was developed which included: completing a study of the court support worker role in each courthouse; developing a single policy and procedures manual that would be used in all courts; amending the Information Intake form and the resulting Information System by developing common definitions for data capture. In addition, a survey was conducted on the availability of psychiatrists to assess, treat and follow persons before the courts.

A task group made up of front line workers from the individual courthouses were given responsibility to conduct the role study, the development of the

policy and procedure manual and to make changes to the MIS system. The Consortium hired a consultant who had worked on the review to assist them with these tasks. The role study confirmed that even though the culture and procedures in each courthouse were different, the court support worker role was similar across all courts. At this writing, a single draft policy and procedures manual has been completed and will be used in all the courts.

The survey on availability of psychiatric services indicated that it is difficult to connect people to outpatient psychiatrists outside the courts. Wait times can exceed six months. This survey proved valuable to the Consortium when the Ministry of the Attorney General decided to review and change its policy concerning the payment of psychiatrists in the courts. The Consortium was able to ensure that funding would be available for general psychiatric assessments and treatment as well as court-ordered assessments under the *Criminal Code* with respect to fitness.

The changes to the MIS have enabled the Consortium to compare client characteristics and volumes across the five courts and well as identify problems in accessing services. This data will assist the Consortium as it tries to develop service networks to improve access for mentally disordered offenders to local mental health service providers in each courthouse's catchment area. These project activities have created a new found sense of trust and cohesion among the front line staff from the member agencies.

The Consortium has met with the senior regional judge once to review progress since the Review and is in regular communication with the judge responsible for the Mental Health Court. The Consortium plans to meet at least annually with judges and court officials in each courthouse. These meetings will be convened by the local court support workers and be used to inform the work plan of the Consortium. The Consortium is now developing proposals for pre-charge diversion services and enhancements to court support services in anticipation of a government funding announcement. This strategic and collaborative approach is a welcome departure from the historical competitive approach to funding.

#### DISCUSSION

Based on the literature, it is clear that mental health services in criminal courts generally have developed in the absence of clear government policy and without much systematic and collaborative planning, implementation and evaluation. The service response to mentally ill accused in the five Toronto courthouses has followed that pattern in that there has been no provincial policy or pro-

gram framework, weak planning across provider agencies, minimal planning across the mental health and criminal justice systems, and no clear leadership combined with fragmented accountability across several service providers. Despite the absence of these important critical enabling factors, and although outcome data are not available, current mental health services in the five Toronto courthouses are viewed as being very valuable by all stakeholder groups. Much of the value is related to the decentralized service delivery structure that provides a high level of on-site responsiveness to client needs. The development of a formal network to create a single, integrated mental health program across these courthouses is viewed as a positive step in the evolution of these valued services. Timely access to needed community and hospital services, however, is an ongoing challenge, a challenge similar to that faced by many mentally ill individuals with a criminal history in accessing mental health services.

[Editors' note: Dianne Macfarlane, Centre for Addiction and Mental Health; Steve Lurie, Canadian Mental Health Association; and Shannon Bettridge and Howard Barbaree, Centre for Addiction and Mental Health.]

- <sup>1</sup> U.S. National Coalition for Jail Reform, *Removing the chronically mentally ill from jail* (Washington, DC, 1984).
- <sup>2</sup> H.J. Steadman, M.W. Deane, J.P. Morrissey, M.L. Westcott, S. Salasin, & S. Shapiro, "A SAMHSA research initiative assessing the effectiveness of jail diversion programs for mentally ill persons", *Psychiatric Services*, Vol. 50, No. 12, 1620-23 (1999); J. Draine, & P. Solomon, "Describing and evaluating jail diversion services for persons with serious mental illness", *Psychiatric Services*, January 1, 1999, 50(1), 56-61.
- <sup>3</sup> M. Naples, and H. Steadman, "Can Persons with Co-occurring Disorders and Violent Charges Be Successfully Diverted?", *International Journal of Forensic Mental Health*, Vol. 2, No. 2, 137-43 (2003).
- <sup>4</sup> A. McGaha, R.A. Boothroyd, N.G. Poythress, J. Petrila, & R.G. Ort, "Lessons from the Broward County Mental Health Court Evaluation", *Evaluation and Program Planning*, 25:125-35 (2002); D.V. James, "Court diversion at 10 years: Can it work, does it work and has it a future?", *Journal of Forensic Psychiatry*, 10:507-24 (December 1999).
- <sup>5</sup> D.V. James, "Court diversion at 10 years: Can it work, does it work and has it a future?", *Journal of Forensic Psychiatry*, 10:507-24 (December 1999).
- <sup>6</sup> D.V. James, F. Farnham, H. Moorey, H. Lloyd, K. Hill, R. Blizard, *et al.*, *Outcome of psychiatric admission through the courts*, RDS Occasional Paper No 79 (London: Home Office, 2002); M. Rock, "Emerging issues with mentally ill offenders: causes and social consequences", *Administration and Policy in Mental Health*, 28:165-80; H.J. Steadman, M.W. Deane, J.P. Morrissey, M.L. Westcott, S. Salasin, & S. Shapiro, "A SAMHSA research initiative assessing the effectiveness of jail diversion programs for mentally ill persons", *Psychiatric Services*, Vol. 50, No. 12, 1620-23 (1999); H.J. Steadman, & S.M. Morris, D.L. Dennis, "The diversion of mentally ill persons from jails to community-based services: A profile of programs", *American Journal of Public Health*, 85:1630-35 (December 1995).
- <sup>7</sup> A. Watson, P. Hanrahan, D. Luchins, & A. Lurigio, "Mental health courts and the complex Issue of mentally ill offenders", *Psychiatric Services*, 52(4), 477-81 (April 2001); J.S. Goldkamp, & C. Irons-Guynn, *Emerging judicial strategies for the mentally ill in the criminal caseload: mental health courts in fort Lauderdale, Seattle, San Bernardino, and Anchorage* (Philadelphia: Crime and Justice Research Institute) prepared for the U.S. Bureau of Justice Assistance, (April 2000).
- <sup>8</sup> H.J. Steadman, S. Davidson, & C. Brown, "Mental health courts: their promise and unanswered questions", *Psychiatric Services*, 52:457-58 (April 2001).
- <sup>9</sup> E. Trupin, & H. Richards, "Seattle's mental health courts: early indicators of effectiveness", 26(1) *International Journal of Law & Psychiatry*, 33-53 (2003).
- <sup>10</sup> M. Cosden, J. Ellens, J. Schnell, Y. Yasmeen, and M. Wolfe, "Evaluation of a Mental Health Treatment Court with Assertive Community Treatment", *Behavioral Sciences and the Law*, 21:415-27 (2003).
- <sup>11</sup> R.A. Boothroyd, N.G. Poythress, A. McGaha, & J. Petrila, "The Broward mental health court: process, outcomes and service utilization", 26(1) *International Journal of Law and Psychiatry*, 55-71 (2003).
- <sup>12</sup> R.A. Boothroyd, N.G. Poythress, A. McGaha, & J. Petrila, "The Broward mental health court: process, outcomes and service utilization", 26(1) *International Journal of Law and Psychiatry*, 55-71 (2003).
- <sup>13</sup> For example, E. Trupin, & H. Richards, "Seattle's mental health courts: early indicators of effectiveness", 26(1) *International Journal of Law & Psychiatry*, 33-53 (2003).
- <sup>14</sup> R. Slate, "From the Jailhouse to Capitol Hill: Impacting Mental Health Court Legislation and Defining What Constitutes a Mental Health Court", *Crime & Delinquency*, 49:6-29.
- <sup>15</sup> R.D. Schneider, "Mental disorder in the courts", *Criminal Lawyers Association Newsletter*, 19:4 (December 1998).

## • BC 2003 WILDLAND URBAN INTERFACE FIRES: MANAGING AN INTEGRATED HEALTH SYSTEM DURING A REGIONAL EMERGENCY •

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### INTRODUCTION

Eighteen months after it was constituted under the *Health Authorities Act* of British Columbia (BC) the Interior Health Authority (IH) was confronted by an emergency situation arising from wildland urban interface fires during the summer of 2003.<sup>1</sup> Many aspects of the emergency situation tested the newly formed relationship between IH and the Ministry of Health Services. Through its Emergency Preparedness Branch, the Ministry was able to provide linkages with emergency agencies provincially, nationally and internationally. The Ministry's BC Ambulance Service (BCAS) also played a critical role in managing the response to the interface fires of 2003.

In keeping with organization-wide Quality Management (QM) principles of continuous improvement through learning and growth, IH proposed a collaborative QM Review involving IH, the Ministry, and the BCAS. One of the purposes for the QM review was to reflect the reality of how IH, BCAS, and the Ministry work together during an emergency response.<sup>2</sup> The collaborative approach to the review was seen as providing a rich quality management perspective that could not be achieved by each of the above entities conducting individual reviews. The review was commissioned on November 10, 2003, and completed by the end of January 2004.

This article provides an overview of the management issues confronted by IH as a regional provider of integrated health services during the 2003 interface fires.

### OBJECTIVES

The way health services were managed during the interface fires provided an opportunity to assess how the BC health system could respond when health services in one part of the province were being threatened. By focusing on this episode, the intent was to learn how a provincial system should respond to an emergency situation within the context of the newly formed Health Authority structure. To capture lessons learned from this experience in preparation for future emergencies, the following objectives were collectively developed:

- To assess the state of preparedness of BC health services for all hazard response.
- To understand and document the chain of responsibility, the decision-making processes, and the overall management of health sector emergency response while there is continuation of business at the provincial, regional and local levels.
- To assess: a) management of available health resources during the emergency response to this event; b) potential for health service delivery in non-traditional settings; and c) opportunities for realignment and deployment in future emergency threats.
- To review coordination between health services and other critical services such as utilities, transportation, etc.
- To review financial management processes.
- To identify risk elements and opportunities that warrant consideration for future emergency response planning.
- To make recommendations regarding systems and processes that would strengthen emergency preparedness for health services in BC.

### METHODOLOGY

This review of management practices was conducted in accordance with standard QM cyclical evaluation criteria that require an organization to be in an anticipatory mode, routinely conducting systems/process reviews; nurture and foster stakeholder relationships; and make data-driven decisions. A QM Matrix Assessment instrument was customized to correlate the relationships between these criteria and emergency management job functions.<sup>3</sup>

An issues analysis was conducted for each objective and each issue was converted into questions where applicable. This process formed the basis for developing a structured interview schedule comprising 36 questions. All interviews were digitally recorded.

Where individuals responded that questions did not apply to their role in the emergency response, they were given the option of not answering. As the review proceeded, interviewees suggested that addi-

tional persons be interviewed to add perspective to the review. By the end of the survey, a total of 46 persons were interviewed, for an average of 40 minutes each.

Interviewees were provided with background material prior to the interview. This material was comprised of a Power Point discussion deck that suggested roles and relationships of the entities involved in managing the interface fires. As a consequence of one-on-one brain storming, changes were made after each series of interviews. Fifteen interviews with individuals who were on-duty at the critical time during the interface fires were put on the horizontal part of a matrix. The vertical axis was comprised of the questions listed. Edited comments were developed from interview recordings and these comments were compared for trend analyses across the horizontal axis. In addition, transcripts were developed from other key interviews.

#### THE UNIQUE REALITY OF THE 2003 BC WILDLAND URBAN INTERFACE FIRES

At the public hearings of the Firestorm 2003 Provincial Review,<sup>4</sup> commissioned by the Government of British Columbia on October 4, 2003, it was revealed that emergency management officials within the province had not anticipated the kind of interface fires experienced in 2003. The realization of how quickly circumstances could change and impact people's lives does not seem to have been contemplated by provincial planning authorities in terms of large urban communities. The consequences such circumstances would have on critical agencies, such as Health Authorities, was not part of any overall provincial emergency plan. The possibility of having to evacuate community-based patients and residential care clients, as well as acute patients, from a major regional referral centre which is located centrally in a valley surrounded by a very mountainous terrain with restricted road access, had not been envisioned as a situation that could arise.<sup>5</sup> Establishing an emergency management infrastructure for the 2003 interface fires and integrating it with the provincial emergency infrastructure was an unrehearsed experience for IH.

#### OVERVIEW OF INTERIOR HEALTH

With its corporate office in Kelowna, IH serves a region that stretches from Williams Lake south to the US border states of Washington, Idaho and Montana, and from Tatla Lake in the Chilcotin to the Alberta border. The population served is approximately 690,000 people. Figure 1 shows the area served by IH relative to the rest of BC. IH is organized into four Health Service Areas (HSAs), each

one functioning as a business unit with responsibilities for a continuum of care — acute, residential, home and community, mental health and addictions — within its geographic area, see Figure 1. Public Health is a separate corporate function that is managed centrally, with decentralized offices that approximate the HSAs.

IH is governed by a Board of Directors and administered by a Chief Executive Officer (CEO). Each HSA is managed by a Chief Operating Officer (COO) and management team. Each management team includes a Medical Director who provides liaison with physicians who have privileges in IH facilities. Physicians providing medical services function mostly as independent practitioners in the community. Corporately, the four HSAs are served by a health authority-wide organization including strategic and corporate services and human resources.

The diversity of IH's services is shown in Table 1. IH operates 36 acute care sites and 62 residential facilities. There are 56 communities within the boundaries of IH and ten regional districts. There are 55 First Nations Communities within IH's geographical boundaries. In addition, there are four Provincial Regional Emergency Operations Centres (PREOCs) that overlap the boundaries of IH — Southwest (Surrey), Central (Kamloops), Northeast (Prince George) and Southeast (Nelson). The BCAS offices in Kamloops cover the ambulance service area across IH.

IH's brief to the Firestorm 2003 Provincial Review described the legal frame of reference as prescribed in the *Emergency Programs Act* and the *Health Authorities Act*.<sup>6</sup> It is also documented in BC Ministry of Health Services directives on emergency preparedness.

#### THE MANAGEMENT OF AN EMERGENCY

The management of an emergency situation requires the establishment of an organizational entity known as an Emergency Operations Centre (EOC).<sup>7</sup> Figure 2 illustrates the organization chart of an EOC. The BC Emergency Response Management System (BCERMS) requires organizations and jurisdictions in BC to understand how to constitute an EOC in an emergency and how their EOC relates to the PREOC(s) in their area.

Since its formation in December 2001, IH was active in the process of developing an infrastructure to support emergency preparedness as required by provincial legislation and in accordance with Canadian Council on Health Services Accreditation standards.<sup>8, 9, 10, 11, 12</sup>

At the time when the 2003 interface fires appeared as a major threat, IH was in the process of

hiring an emergency-management consultant as part of the strategy for establishing a state of emergency preparedness within the organization. The appearance of this individual on site at the advent of the fires served to facilitate the prompt establishment of an EOC culture within IH and its HSAs.

### STAKEHOLDER ANALYSIS

As a result of the unique circumstances evolving around IH during the interface fires, new and instant relationships were formed between IH, the community, local and provincial government agencies, and federal level stakeholders. These relationships influenced how IH was able to address health service needs while providing viable options in serving its mission. Glick and Kulbok, in their discussion on program revision in health care,<sup>13</sup> point out that environmental considerations including culture, economics, politics, and social forces have the potential to influence program development, implementation, management and change in the context or environment of a program, and that such forces are integral to the program's long-term viability and success. To gain a perspective of the success of Interior Health's response during the fires, persons interviewed were asked to "brainstorm" around illustrations provided in Power Point format. This process resulted in some reiteration of the exhibits, the re-drafting of most and the development of others. The process helped to achieve a better understanding and define IH's relationship with its stakeholders.

Figure 3 evolved from these one-on-one "brainstorm" sessions and portrays the kinds of relationships supporting IH in its management of the emergencies arising from the interface fires. In reading Figure 3, it has to be emphasized that the review was an assessment of the situation from the point of view of IH. For this reason IH, and the HSAs that constitute IH, in collaboration with the Ministry, are central to the analysis as shown by the dotted square in the diagram. Each of the entities portrayed in Figure 3 would have a similar view of the events unfolding around them during the fires. The overlapping nature of the relationships portrayed in Figure 3 stresses that such relationships were defined as providing "backup" at a time of a defined need and upon request during the situation. Several instances were noted where there was a lack of appreciation or realization of the full potential arising from such relationships until after the event had occurred. These matters are being addressed in subsequent planning activities.

Figure 3 also shows that the HSAs found themselves in the front line when it came to managing the response to the interface fires. The organizational structure of IH establishes the HSAs as business

units with full responsibility for handling all situations arising locally and making the judgment call as to when to request assistance.

### THE HEALTH SERVICE AREAS

The first area that IH became involved with managing the consequences arising from the fires was in the **Thompson Cariboo Shuswap Health Service Area (TCSHSA)** in the North West part of the IH region. The Area's Medical Director assumed the role of Incident Commander, setting up an EOC in the TCSHSA's head office in Kamloops, and keeping the IH corporate office located in Kelowna informed of events. The newly hired emergency management consultant provided advise to the TCSHSA, but wasn't involved in the direct management of the situation. To a large degree, the experience gained at the TCSHSA served as a training platform for the management of later situations arising in the other three HSAs.

The **East Kootenay Health Service Area (EKHSA)** towards the East quadrant of IH, was initially involved as a standby reception area for persons in need of care being evacuated from fires in Alberta. With fires threatening the City of Cranbrook, the main urban centre in the EKHSA, it became apparent that prepared evacuation plans were building-specific or neighbourhood-specific, with no plans for the possibility of the whole city being evacuated. Therefore, plans had to be created as the situation unfolded. Information provided by daily teleconferences among the key stakeholders about the number and direction of the urban interface fires was seen as being critical in planning and managing the local scene. Describing the situation, Kelly Madigan, Mental Health and Addictions Director for the EKHSA, said:

We were getting information that there was a fire between Radium and Golden and there is only one highway. We had to make various contingencies within a couple of hours. We had planned to send some clients and patients to Golden then we learned the road was cut off. We had to change the plan. We agreed that we would send them to Creston. Then there was a fire near Creston so we couldn't go there. We had to keep changing the plans. It was amazing to me how quickly people were able to change the plans. This required coordination among the municipalities, the service clubs, as well as private industry. I recall receiving confirmation on the need for thirty-two motel rooms by the next day, a whole gym set up for 100 people in the same time-frame, and organizing a ballroom for eighty people within a few days. It was amazing how quickly it all came together.

**The Kootenay Boundary Health Service Area (KBHSA)**, the Central South area of IH, was on standby but did not experience any of the evacuation situations experienced in the other HSAs. Had there been a need, plans were in place to reactivate a decommissioned hospital, which could have been used for receiving patients from other HSAs.

**The Okanagan Health Service Area (OKHSA)**, the South West quadrant of IH, established an EOC out of the IH corporate offices in Kelowna, working within the IH EOC. A major concern was the air quality and the effect it could have on clients in the community, patients in the hospital, and the general population that might require acute services. There was also a concern that power lines serving the hospital, and also necessary to support patients in their homes who might be dependent on electrical devices, might be destroyed.

Kelowna General Hospital (KGH), IH's central tertiary care referral hospital, had an existing hospital emergency response disaster plan. While KGH was never under any threat from the fires, there was serious concern that the smoke could affect air quality to the extent that the hospital would need to be evacuated. Describing the plans for evacuation and relocation, KGH Emergency Planning Coordinator, Penny Venables said:

The arrangement that was in place with Plant Engineering was that they would sound the alert concerning air quality — to both the Municipal and IH EOCs, however, the initial direction for the implementation of the plan for evacuating the hospital based on this information would be from the Municipal level EOC. At that crucial time, the evacuation plan, arranged between KGH and BCAS, and updated every 12 hours, would be activated, and would dovetail into plans that the IH EOC had in place regarding the availability of the lower mainland beds.

The issue of evacuation “alert” vs “order” would have had to have been addressed, since my understanding was that the Fire Commissioner's Office would not have been issuing an “order” based on the potential for fire destruction for KGH. Once again — since we had never had to make decisions like this before — there was not a pre-arranged solution. My impression is that the medical staff would be apprised of the situation by the IH EOC and involved at that point in the decision-making.

In addition to planning for the potential impact of the fires on its operations and patient population, KGH was engaged in supporting and caring for staff members, many of whom experienced evacuation and some of whom lost their homes to the fire. Car-

ing for the caregivers placed considerable strain on human resource management during the crisis. This degree of human resource crisis intervention was not anticipated and proved to be one of the most challenging parts of the experience.

#### CORPORATE INTERIOR HEALTH

IH's emergency response plan states that a health authority-wide EOC will be established if more than one health service area is facing an emergency or disaster, or if an HSA requests support. With the realization that wildland urban interface fires were occurring across all HSAs, in consultation with his staff, the IH CEO made the decision to constitute an Authority-wide EOC on August 19, 2003, retaining the emergency management consultant in an advisory leadership role as the EOC Coordinator.

IH-wide communication channels were established through the medium of teleconferencing. Morning and afternoon teleconference calls were organized so that all persons involved in the management of the fire situation across IH had the opportunity to provide a status report on the circumstances being experienced in their HSAs. BCAS also participated in these teleconference calls. This method proved to be an efficient and effective communication tool for overall tracking and planning purposes. Additional teleconference calls were held with the Ministry and other Health Authorities, to keep them apprised of the evolving situation and response effort and to plan for external support, if needed.

Within 24 hours of constituting an Authority-wide EOC, IH had a fully functioning arrangement whereby all persons involved were integrated, understood their roles and responsibilities, and could communicate with one another in real time. Describing the situation from within the IH EOC at the peak of the crisis, IH Risk Manager Ann Ferguson reported:

The EOC took on a life of its own — scheduled teleconference meetings (almost hourly), updating databases, organizing meals and other activities of daily life. The sense of group belonging that developed in the charged atmosphere was evident. I recall thinking I was privileged to be part of this team. Egos were, for the most part, left at the door — t-shirts and jeans became the norm. Everyone worked long hours, with little rest. Sure, there were a few tensions from time-to-time, but these didn't interfere with the focus on the work to be done.

Re-entry to regular routines was difficult. I suspect this reaction is experienced similarly by anyone who works closely with a team to accomplish a sig-

nificant goal over a charged, short, and immediate timeframe. To this day, I feel a special closeness to others who were in the EOC. We were part of something bigger than ourselves.

## INTEGRATED HEALTH SERVICES DELIVERY

With the establishment of health authorities in BC, integrated health services across the care continuum (including public health, home and community care, mental health, residential care, and acute care) became a reality. This change had a significant impact on emergency planning and response. When health care was delivered by separate societies or directly through the Ministry, each entity was responsible for emergency planning. Most previous health emergency planning was focused on facility response to internal emergencies and mass casualty management. With the formation of health authorities, there was a growing recognition of the complementary and interdependent role of health services and public health in emergency management. Also, with the concomitant shift from facility to home-based service delivery, the health care system's business continuity responsibilities also changed. Planning for provision of services to home-based clients during an emergency response such as an interface fire, was a new adventure for health care providers. Clients needed to be located by street address, rather than by name. Assessment of the potential impact of power outages and evacuation on home-based client service delivery needed to be carried out, and plans made to support and provide continuity of care, should evacuation be required.

Explaining the relative relationship between hospital care, pre-hospital care and community care during the fires Murray Ramsden, IH CEO said:

Our emergency departments were quiet, the hospitals were quiet. The pressure was on the community side; our assessors and our home care nurses having to move the clients making sure they got set up with families or alternative accommodation. That was the big push, and those community client needs were met.

Prior to the 2003 interface fires, no formal mass community evacuation plans were developed for IH. Rather, evacuation plans were developed for single facilities, with reception areas in the same community. In fact the QM review process did not locate any plans in Canada for addressing such a scenario.

Lessons learned during evacuations in the TCSHSA influenced later evacuation decisions. Traditional facility evacuation plans identify alternate reception centres in the same community. However, when an entire community is threatened, and much of health's busi-

ness is community-based, the health authority needs to be prepared for supporting and evacuating its clients. Moving clients only once formed the rationale for decisions related to evacuation and relocation.

With facilities and programs under one health authority, it became easier to coordinate moving of clients to like facilities in other communities. As a result, 53 clients were evacuated at the beginning of August from two IH facilities in Armstrong to Vernon, a distance of 23 km. In mid-August, a second evacuation of 97 residents occurred from Kelowna to Vernon, some 55 km away. IH made these decisions even though local community leaders expressed concern that moving people out of the community could result in panic among those left in the community.

The responsibility of IH for clients in private care facilities that have contract and licensing relationships with IH was also tested during the Okanagan fires. The second evacuation from Kelowna to Vernon involved residents at a private care facility. IH had no direct responsibility for the management of the facility or the delivery of care within the residence. The owner was reluctant to initiate evacuation of the residents because of concerns about liability. When the evacuation alert was received, IH initiated obtaining an evacuation order from the Fire Marshal's office, to institute evacuation. Again, the evacuation plan was based on lessons learned during previous evacuations. IH was prepared for the evacuation by having staff and transportation vehicles on standby. These vehicles were used to evacuate groups of residents in their wheelchairs or with other walking aids. The residents' beds were dismantled, delivered to the receiving facility, and reassembled.

A critical feature in these arrangements was the need to label each person, their belongings and their bed. The private facility caregivers were reassigned to Vernon and were paired with IH personnel to ensure continuity of care being provided to their clients. These arrangements provided some degree of familiarity for clients in a strange place.

IH's Public Health Division played a critical role in the emergency response efforts. Health Protection staff carried out inspections and provided just-in-time education and support for forestry fire camps on issues such as sanitation, food and water safety, and hygiene matters. Public information was developed on living with smoky skies and what issues to consider when returning home after evacuation. As Ken Christian, Director of Health Protection stated: "Fires are not primarily a health concern, but communities in crisis are".<sup>14</sup>

## SURGE CAPACITY PLANNING

During the 2003 interface fires, plans were made in real time for such facilities as schools, hotels and

community centres being converted into a temporary care facility to house evacuated clients. A MASH-type (Mobile Army Surgical Hospital) hospital unit was also unpacked and set up to care for firefighters during an outbreak in a forestry fire camp. Traumatized persons and vulnerable elders often arrived at Emergency Social Service (ESS) reception centres with little backup support. IH provided staff resources to the ESS reception centres to assist with screening evacuees for health care needs, and to recommend alternate arrangements for housing this population. IH staff were also present at community meetings to provide information on mental health concerns as well as other health concerns.

The BC health system can be described as operating within a “just-in-time” mode of delivery under normal circumstances. The possibility of having to unexpectedly serve the needs of 100 or possibly several hundred additional clients may require new arrangements.

In general discussion about dealing with “surges” of people during an emergency, there is a need to differentiate between two groups. One consists of persons who witness a great deal of trauma, such as seeing people injured or die around them, or having their homes burned down. These people are described as the “worried well” suffering from varying degrees of post-traumatic stress. They require separation from and different treatment than acute care traumatized patients. Having the “worried well” in the local hospital emergency department is inappropriate from the perspective of efficient patient management.

Surge capacity is also of concern during a response to an emergency situation such as a pandemic disease outbreak. During the SARS experience in Toronto earlier in 2003, it was demonstrated that treating all SARS victims in the hospital setting is not an efficient way of handling the situation. The consensus was that there needs to be some kind of safety valve to protect the acute care system to deal with the most critically ill patients. It is suggested that clusters of persons, be they post-traumatic cases or potentially infected persons requiring isolation, need to be cared for in an alternative care setting.

Following from this, there is a need to establish surge capacity within health services resources and possibly among community physicians. The concept of access points such as Emergency Health Access Centres (EHACs) can be seen as building on the Canadian health care attribute of “accessibility at time of need”.

#### PHYSICIAN INVOLVEMENT IN PUBLIC HEALTH EMERGENCIES

The effect of the interface fires on IH management was assessed in relation to a state of prepared-

ness for all health hazards. Discussion included other emergency threats that could impact on IH. Risks facing IH include floods and nuclear accidents. Earthquakes as well as floods are risks for other parts of the province, with IH facilities serving as reception areas. A pandemic disease outbreak could have major consequences for the province and the country. These discussions led to some interesting issues surrounding the involvement of physicians in emergency management outside the hospital.

#### MEDICAL INVOLVEMENT IN PUBLIC HEALTH EMERGENCIES

Emergencies involving issues of public health, such as air quality, communicable disease, food safety, potable water and so forth, are managed through the Medical Health Officers on staff at IH. During the interface fires, the public health division within IH assumed a very active role in the management of environmental health concerns.

The priority during the fires was planning for the possibility of evacuation/relocation of facility patients. Under these circumstances, patients are evacuated and relocated, not discharged. It is not a requirement for the patient’s attending physician to be present during the evacuation. In the Command Centre structure in an acute care facility’s emergency response plan, the Chief of Staff or his/her delegate will work with direct patient care staff to make decisions regarding patient evacuation/relocation. In residential care settings, these decisions are usually made by administrative staff and implemented by residential care staff.

Figure 4 evolved from discussions about the relationship between the IH administrative structure, shown in boxes, and the Medical Staff Organization, shown in circles, during an emergency situation. The Medical Staff Organizations at the level of the HSAs were seen as being more relevant in relating to HSA emergency operations centres (EOCs) than to the IH EOC. Figure 4 does show a “fanning out” capability at the IH corporate level for contacting physicians and possibly directing them to other parts of the region if the need arose.

At the hospital level, the role of physicians in an emergency response differs little, if at all, from routine practice. They remain responsible for patient care, including providing appropriate direction on clinical management of patient evacuation/relocation to another facility for which they may not have privileges. It was not considered important for physicians to know where patients were being relocated because, as was the case in the EKHSA, the availability of egress routes could change at a moment’s notice. The priority was to ensure that patient records and medications accompanied the patient,

thereby facilitating continuity of care at the receiving centre wherever it may be.

When discussing the role of physicians in the management of an emergency outside the hospital, an emergency management leader stressed that emergency management is different from the management of an emergency. The former includes prevention/mitigation, preparedness, response and recovery, the latter involves crisis and consequence management. The possibility of designated physician leaders being available who are trained in both modes of management was acknowledged to be the ideal situation in the management of a regional emergency.

The activation of an emergency plan and setting up an EOC involves transcending from a state of preparedness Q1 to an emergency management state Q2 (see Figure 5). The decision to constitute an EOC is an administrative function. In terms of stressing the immediacy with which it is expected to occur, the process can be compared with a “quantum leap”.<sup>15</sup> Recognition that physicians aren’t really needed until clinical judgment is required gave rise to the notion of a “quantum leap within a quantum leap” as illustrated in Figure 5. This model suggests that physician involvement can be seen as raising the emergency management bar to a Q3 level in terms of organizational complexity. Both processes would occur simultaneously with the implementation of the hospital’s mass casualty plan. The need to involve physicians in a public health emergency was seen as necessitating a second level of activation. Discussing Figure 5 in relation to physician involvement in emergency management, Dr. Jennifer Rice, Medical Director, OKHSA said:

You don’t call physicians to be on standby. Call them when you need them. They will come.

This acceptance that physicians will always serve at times of an emergency was said to be part of the Ethical Code all physicians are required to adhere to. The possibility of too many physicians arriving at an emergency site without any coordination or direction was said to be problematic. In considering the optimum management of physicians services during an emergency outside the hospital the question was asked: Is there a need to establish physician leaders who are trained in managing regional emergencies?

#### CODE ORANGE OR CODE GREEN?

In the course of this review, physician involvement in emergency management was most frequently made in connection with Code Orange (mass casualties) being activated. The rationale for Code Orange is that all persons in need of medical care will be taken to

the hospital where physicians are in the best environment for treating them. To activate a Code Orange, designated physicians contact their colleagues and ask them to come to the hospital immediately.

The interface fires raised the possibility of hospitals having to be evacuated, which requires activation of a Code Green internal emergency response plan. Most evacuation plans identify alternate facilities in the same community as reception sites. When entire communities were threatened during the fires, relocation of patients out of the community had to be considered. Discussions of evacuation and relocation of hospital patients from one hospital to another resulted in Figure 6 being developed.

Figure 6 illustrates a health system’s response by linking Code Green and Code Orange as an extension of the emergency management infrastructure. The top of the apex of Figure 6 offers a definition of “preparedness”, as a continuous QM process of improvement. It involves the establishment of a plan, designating responsibilities for its implementation and ensuring that the plan is updated periodically. The plan activation involves constituting an EOC. The bottom part of Figure 6 shows how Code Green and Code Orange are linked to the rest of the emergency management process through a health system’s response.

#### IN PRAISE OF DEVOLUTION

BC is one of the most advanced Canadian provinces in implementing the policy of devolution of authority from the provincial health ministry to health authorities. The interface fires served as a test of the devolution infrastructure in supporting management of health services during an emergency.

Confidence in the devolution model was evident among IH staff with their recognition of their CEO as being the final decision-maker. Persons working on the front line related more to IH than to the Ministry. There was an appreciation among IH personnel that they could count on the other Health Authorities for support if requested. The Leadership Council, see Figure 4, chaired by the Deputy Minister and comprising the CEOs from the six Health Authorities, was seen as having the key decision-makers in one place. These resources were seen as providing province-wide coordination to accommodate the needs of a health authority that required help.

In considering, from a QM perspective, the way emergency health services are organized in BC, this review shows that: the system is able to respond to unusual situations; programs are optimally maintained; stakeholder input is critical; and decision-making is based on available data. These emergency management “best practices” were evident at the provincial level within the Ministry of Health and

the Leadership Council as well as at the Health Authority level. During the review, frequent comparison was made with the management of the SARS situation in Toronto. In the absence of a devolved health service delivery system, Ontario's Health Ministry assumed a commanding role, which contrasted sharply with the BC experience.<sup>16</sup>

## BUSINESS CONTINUITY

The conventional understanding of business continuity involves planning for the resumption of business after a disaster. Health services delivery is about preserving continuity of care under all circumstances. In an integrated health system, continuity of care includes responsibility for public health, hospital care and community care, with most people requiring supportive care being located in the community.

The need to preserve continuity of care makes emergency planning for health services different from most other public services. For example, while children can be sent home from school, all hospital patients cannot be sent home as easily. Hospital emergency response plans include procedures to discharge patients who are not considered to be seriously ill. However, it is noted that most patients occupying a hospital bed these days are seriously ill, and will not be able to be discharged home. Relocation of a number of seriously ill patients from a hospital undergoing evacuation requires a different approach from that found in existing Code Green (evacuation) plans. Coordination of such matters requires better planning among federal, provincial and local governments.

This review has shown that health care professionals in IH are very aware of the need to ensure continuity of care under extreme circumstances as well as to resume normal duties as soon as an incident is over. Further planning is required to ensure that continuity of care is sustainable under even more extreme and prolonged circumstances.

## CONCLUSION

This collaborative QM Review sponsored by Interior Health, the BC Ambulance Service and the Ministry of Health revealed that health services are, in general, positioned to respond effectively to emergencies or disasters in BC. The BC Emergency Response Management System (BCERMS) provides a framework for communication and action across jurisdictions and programs. The existence of only six health authorities in the province allows for improved networking and collaboration in furthering the health sector's management of emergencies and disasters.

The 2003 interface fires provided an opportunity to learn about the capacity of the health sector to respond to a disaster while continuing to operate its client/service delivery programs. Lessons learned include:

- **Responsibility for community clients**  
With the growth of client/service delivery in the community, staff must be able to: locate clients by street; understand the risks to clients posed by the disaster; assess support and care requirements associated with the risks during and following a disaster; and plan for continuity of care.
- **Relationship building with community emergency responders including Emergency Social Services (ESS)**  
The comment was made, "When you are facing a disaster is not the time to exchange business cards. Relationships are key to managing disasters — everything else is derivative". It was frequently stressed that there needs to be mutual understanding between the health sector and other community players about how to achieve synergy in their efforts to serve their community during a disaster.
- **Physician involvement**  
It is imperative to engage physicians in emergency response planning at the community response level, especially in light of emerging public health threats.
- **Surge Capacity**  
The business of client/service delivery is changing, necessitating a rethinking of how the health sector can best manage resources in a disaster situation. Planning for alternative care settings and resources is required to ensure the health sector can provide client/service delivery when resources are taxed during an emergency response affecting the health and well-being of the population.
- **Integration of Public Health, Health Services, and BC Ambulance Services Emergency Response Management**  
All partners across the continuum of client/service delivery must understand each other's roles and responsibilities and function as an interacting system in order to achieve an appropriate, effective, and efficient response to community emergencies.
- **Supporting external organizations**  
The 2003 interface fires experience pointed out the necessity for organizations to work together and to coordinate efforts during an emergency re-

sponse. The importance of increasing awareness of and working closely with community-based emergency responders, other health authorities, and other agencies/organizations involved in emergency response management, is apparent.

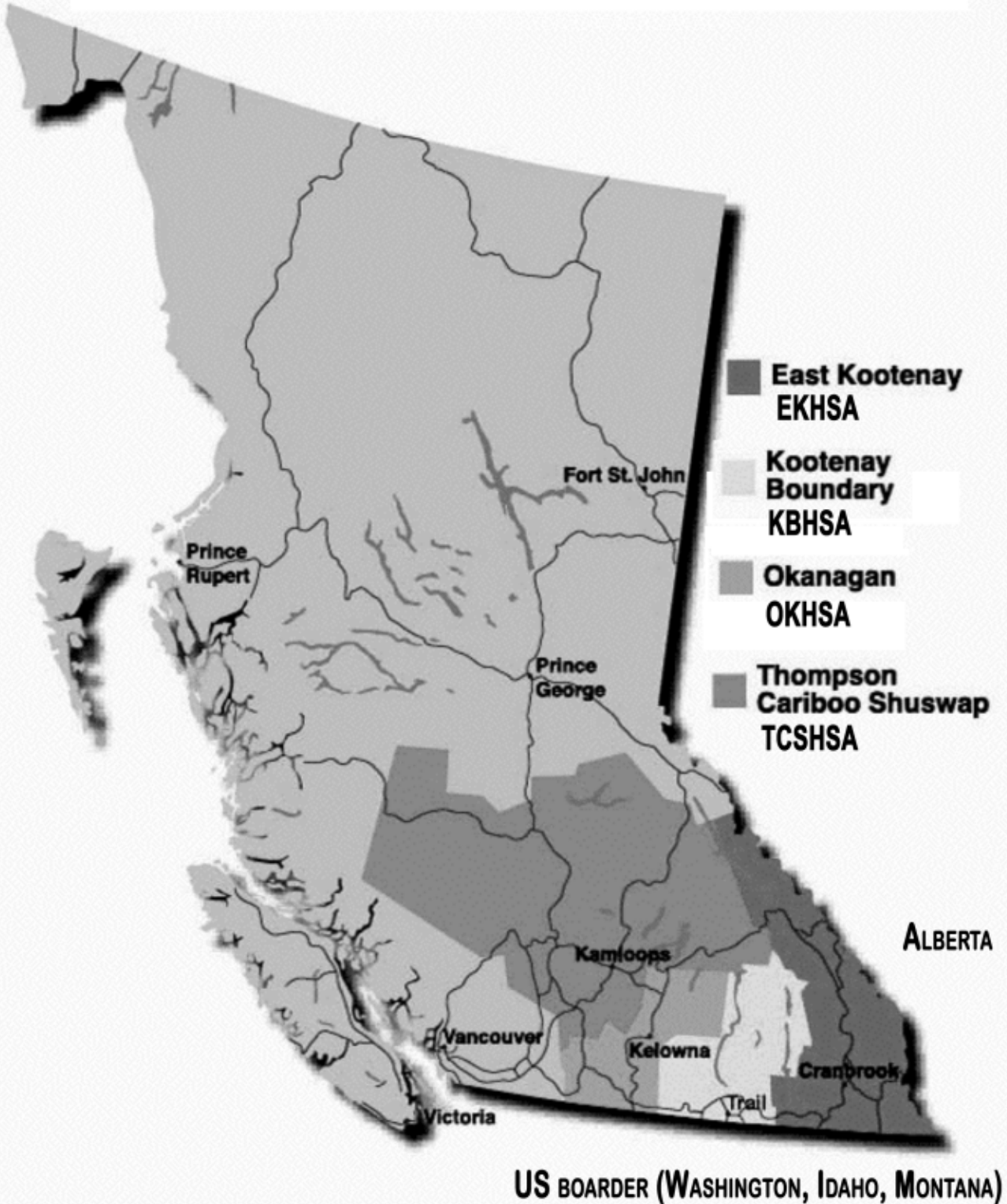
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- <sup>1</sup> *2003 Wildland-urban interface fires — Post-Incident Analysis Report*, prepared by the Office of the Fire Commissioner. [Victoria, B.C.] : British Columbia Office of the Fire Commissioner, [2004] SD 421.34 C26 A193 2004 <[www.mcaaws.gov.bc.ca/firecom/interface\\_fires/interface\\_fires\\_report.pdf](http://www.mcaaws.gov.bc.ca/firecom/interface_fires/interface_fires_report.pdf)>.
- <sup>2</sup> *BC 2003 Forest Fires: A test of Quality Management in Health Services Delivery*, commissioned by BC Ministry of Health Services, Victoria and Interior Health, Kelowna, January 30, 2004. Info-Lynk Consulting Services Inc. Vancouver, copies of this report are available via IH Web site: <[www.interiorhealth.ca](http://www.interiorhealth.ca)>.
- <sup>3</sup> R. Zapp, M. Kraiden, T. Lynch, "SARS: A Quality Management Test of our Public Health Safety Net. BC Centre For Disease Control", *Quality Management in Health Care*, Vol. 13, No. 2, pp 120–29, Spring 2004.
- <sup>4</sup> Firestorm 2003 Provincial Review Established by the Government of British Columbia under the Chairmanship of Hon. Garry Filmon, October 4, 2003.

- <sup>5</sup> British Columbia operational guidelines for evacuations, 2003: Ministry of Public Safety and Solicitor General, Provincial Emergency Program; Justice Institute of British Columbia, Emergency Management Division. [Victoria, B.C.: Provincial Emergency Program] 2003 HV 555 C26 B756 2003, <[www.pep.bc.ca/management/Evacuation\\_Operational\\_Guidelines\\_2003-08.pdf](http://www.pep.bc.ca/management/Evacuation_Operational_Guidelines_2003-08.pdf)>.
- <sup>6</sup> Interior Health Authority, Kelowna BC, Submission to the Firestorm 2003 Provincial Review Team, November 27, 2003.
- <sup>7</sup> For further information on constituting an EOC check out the US Federal Emergency Management Agency (FEMA) Web sites: <[www.fema.gov/preparedness/stat\\_local\\_prepare\\_guide.shtm#eoc](http://www.fema.gov/preparedness/stat_local_prepare_guide.shtm#eoc)> and <[www.fema.gov/preparedness/eoc\\_grants.shtm](http://www.fema.gov/preparedness/eoc_grants.shtm)>.
- <sup>8</sup> Interior Health Emergency Response Management Systems Organization, Draft # 4, November 2002.
- <sup>9</sup> Interior Health, EMERGENCY RESPONSE MANAGEMENT Draft # 1, August 12, 2002.
- <sup>10</sup> Issue Paper: Resources requested to further develop the IH-wide Emergency Response Management System (ERMS), February 25, 2003.
- <sup>11</sup> Issue Paper: Emergency Preparedness and Response Positions, June 17, 2003.
- <sup>12</sup> Interior Health, Emergency Response Management System, Facility/Agency Level Standards, Facility/Agency Level Plan Draft # 1, August 23 2002.
- <sup>13</sup> D.F. Glick and P.A. Kulbok, Program Revision: A Dynamic Outcome of Evaluation, *Quality Management in Health Care*, 2001, 10(1), 37 – 44.
- <sup>14</sup> K. Christian, "BC Burns 2003", Winter Edition 2003, Canadian Institute of Public Health Inspectors.
- <sup>15</sup> T. Lynch, P. Cox, "Emergency Management of SARS: A Quantum Leap or A Paradigm Shift?", 6 R.M.C.H.C. 65 (December 2003).
- <sup>16</sup> *Learning from SARS: Renewal of Public Health in Canada*, October 2003, Chair: Dr. David Naylor <[www.hc-sc.gc.ca/english/pdf/sars/sars-e.pdf](http://www.hc-sc.gc.ca/english/pdf/sars/sars-e.pdf)>.

**FIGURE 1: AREA OF PROVINCE WHERE ALL PUBLICLY FUNDED HEALTH SERVICES ADMINISTRATION ARE UNDER THE INTERIOR HEALTH AUTHORITY**



**Table 1: A Statistical Profile of Interior Health**

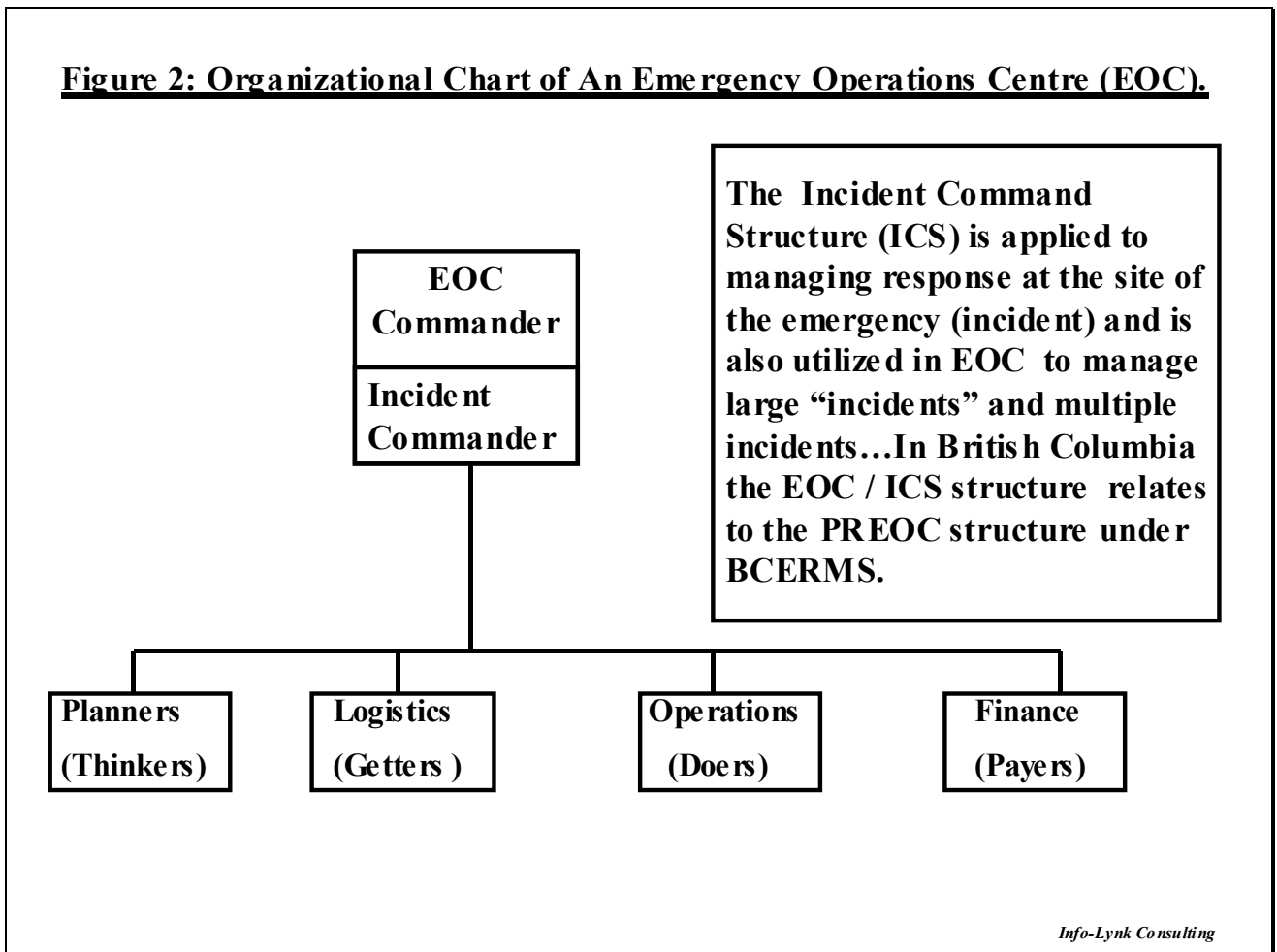
HSAs	OKHSA	TCSHSA	EKHSA	KBHSA	IH Total
Populations Served	313,942	217,007	80,419	79,427	690,795
# Local Governments	17	14	9	16	56
# Acute Care Hospitals (i)	8(5)	13(8)	8(5)	7(4)	36(22)
# Acute Care Beds	606	337	117	123	1,183
# Residential Facilities (ii)	29(+8)	15(+3)	8(+6)	10(+8)	62(+25)
# Employees (FTEs)	4,242.88	2,483.70	1,012.70	1,208.02	9,485.48
# Physicians	576	520	122	133	1,081
# Residents per physician	545	417	659	597	639

(i) Includes all acute care sites, figures in parenthesis are for sites with staffed acute care beds.

(ii) Figures in parenthesis include acute sites that have residential beds.

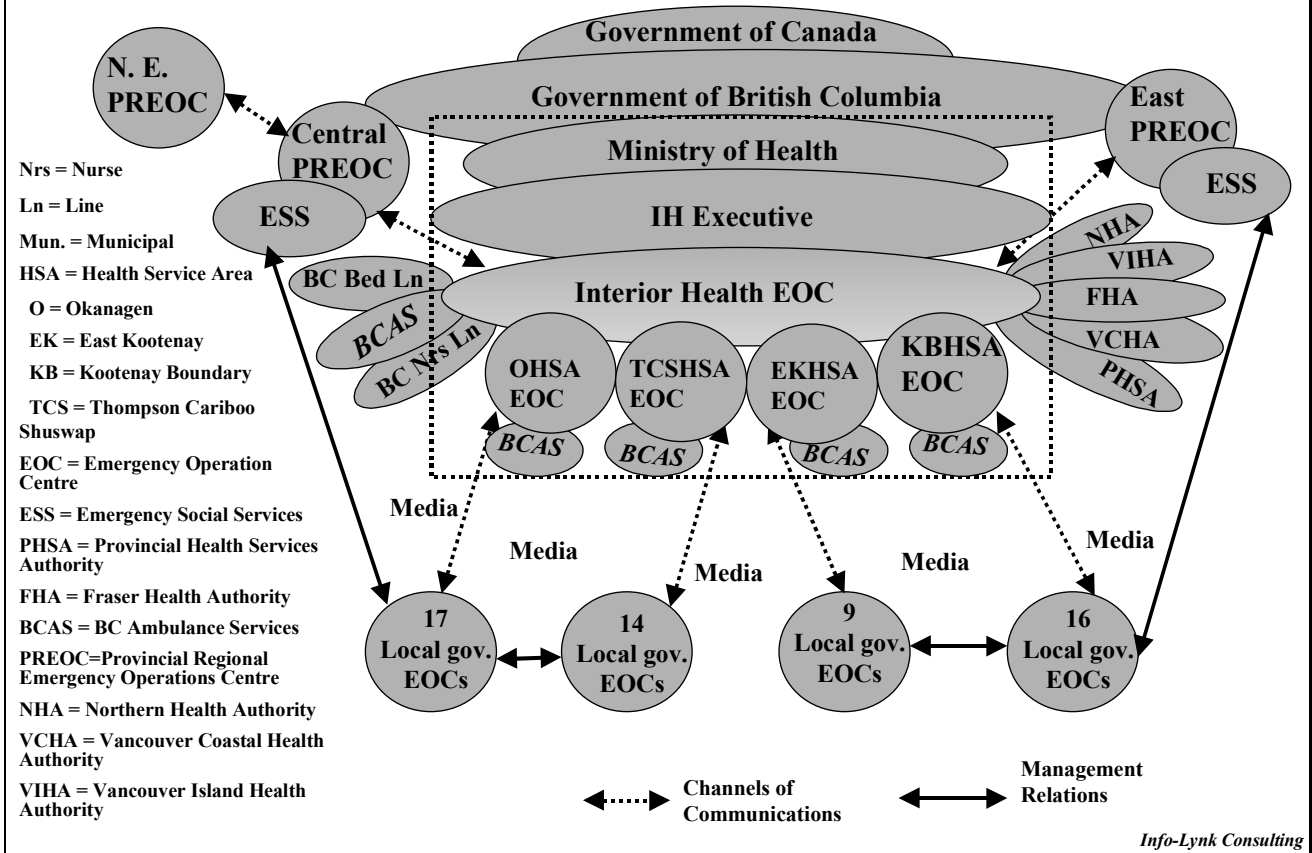
Source: Interior Health

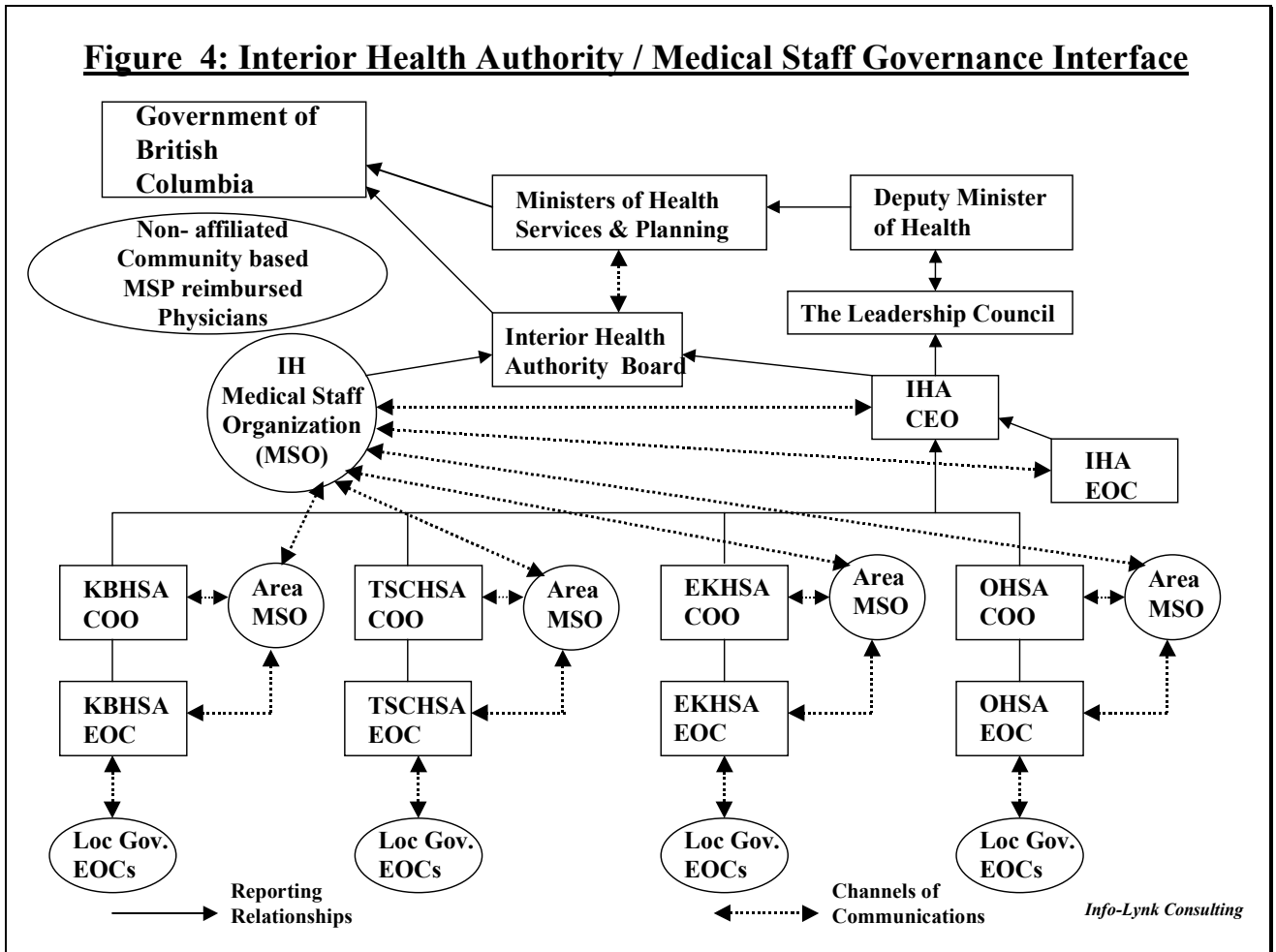
**Figure 2: Organizational Chart of An Emergency Operations Centre (EOC).**



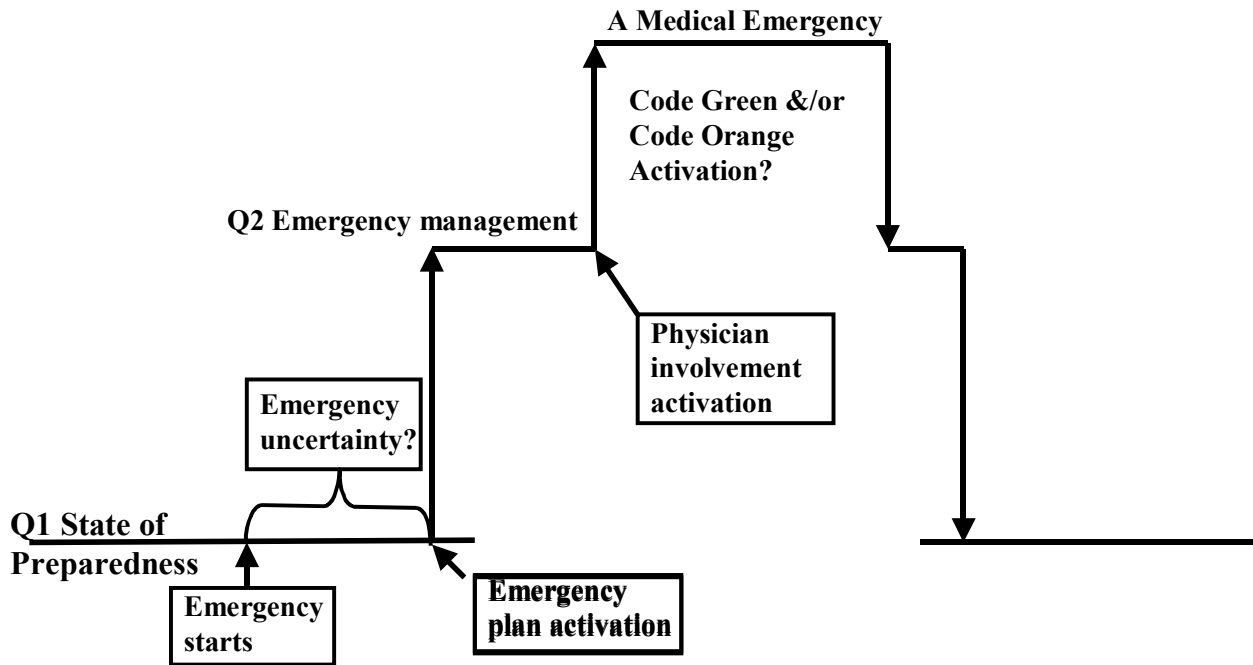
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**Figure 3: Interior Health Management and Back-up Capabilities for the 2003 Fires** QM review focuses on management practices within the dotted line



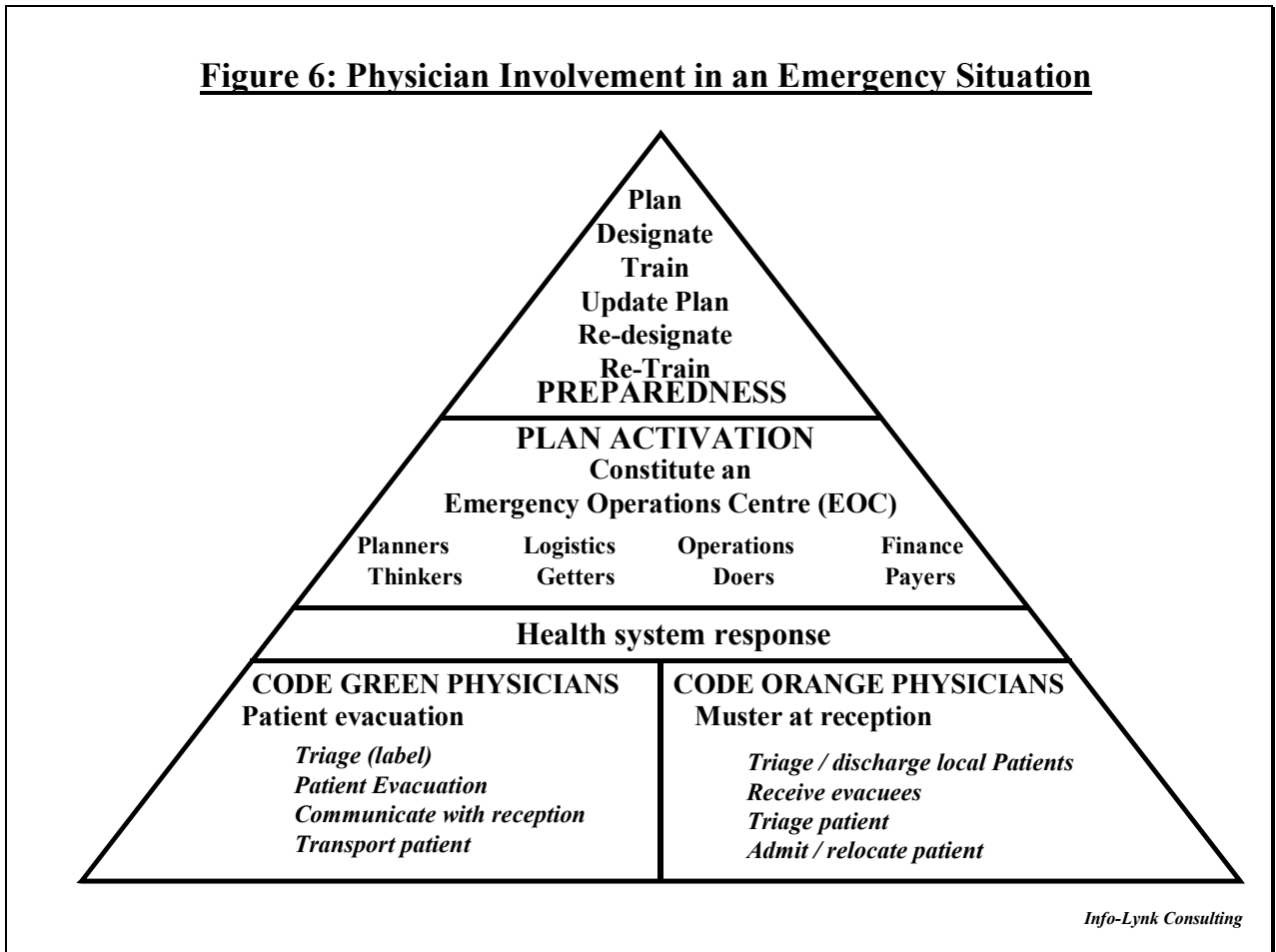


**Figure 5: Physician Involvement in Emergency Management**  
– Making a Quantum Leap within a Quantum Leap



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**Figure 6: Physician Involvement in an Emergency Situation**



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