FOR THE RECORD

Pharmaceutical industry to share research costs

Ten of the world's largest biopharmaceutical companies have announced that they will band together to create a nonprofit research company to conduct studies of joint interest, such as means of streamlining clinical trials, as part of a bid to reduce drug development costs.

The 10 firms — Abbott, AstraZeneca, Boehringer Ingelheim, Bristol-Myers Squibb, Eli Lilly and Company, GlaxoSmithKline, Johnson & Johnson, Pfizer, Genentech a member of the Roche Group, and Sanofi — will establish an organization called TransCelerate BioPharma Inc. in Philadelphia, Pennsylvania. It will be provided with an unspecified budget to conduct research initially focused on "clinical study execution," the firms announced in a joint press release (www.prnewswire.com/news-releases/ten-pharmaceutical-companies-unite-to-accelerate-development-of-new-medicines-170329346.html).

"Five projects have been selected by the group for funding and development, including: development of a shared user interface for investigator site portals, mutual recognition of study site qualification and training, development of risk-based site monitoring approach and standards, development of clinical data standards, and establishment of a comparator drug supply model," the statement added.

"There is widespread alignment among the heads of R&D [research & development] at major pharmaceutical companies that there is a critical need to substantially increase the number of innovative new medicines, while eliminating inefficiencies that drive up R&D costs," Dr. Garry Neil, acting CEO of the nonprofit, partner at Apple Tree Partners and former corporate vice president, science and technology at Johnson & Johnson stated in the press release. "Our mission at TransCelerate BioPharma is to work together across the global research and development community and share research and solutions that will simplify and accelerate the delivery of exciting new medicines for patients."

The board of directors of the nonprofit will include the heads of R&D at each of the 10 member companies. — Wayne Kondro, *CMAJ*

The thin hospital line

Swamped by high volumes of elderly, often-demented patients, constantly facing bed shortages, understaffed, overspecialized and increasingly unable to provide patients "continuity of care," acute care hospitals in Britain are in a near state of crisis, according to the United Kingdom's Royal College of Physicians.

The quality of night and weekend care is particularly precarious, the college states in a report, *Hospitals on the edge? The time for action* (www.rcplondon.ac.uk/sites/default/files/documents/hospitals-on-the-edge-report.pdf). "Mortality for acutely ill patients is higher for those admitted at nights and at weekends, when less experienced doctors are on site. Studies suggest mortality is often 10% higher among patients admitted at weekends, although whether this is due to changes in case mix severity, clinical staffing or other organisational factors is unclear."

A college survey of its members indicated that "one in ten would not recommend their hospital to a family member or friend as a high-quality place to receive treatment and care, and nearly one in four were not sure." Among anonymous comments from college fellows in the survey was one from a physician who stated that "safety is falling to all-time lows as people get moved to wards after the most superficial of assessments and no treatment plan. As a clinician supposedly covering the medical HDU [high dependency unit] and acute renal failure, coming in in the morning is akin to Christmas day but all bad. Hospital at Night leads to the most basic and inept clinical reviews to compound the shuttling of patients around the hospital with no thought to their welfare."

Another physician said he was "unsure about whether to recommend our hospital — I fear other hospitals may actually be worse. EWTD [European Working Time Directive] and shift working has seriously undermined safe patient care and reassurance to patients. We never seem to have enough nurses for basic patient care and cooperative-working IT [information technology] systems actually slow, confuse and distract from care. Handovers seem to be non-existent. Weekends and Bank Holidays function on a skeleton staff of doctors — very dangerous."

The college argued that the time has come to set "higher" standards in acute care hospitals. To that end, it identifies 10 "priority areas of action":

- **"We must promote dignity and patient-centred care**

We must make sure patients are at the heart of service design and clinical practice. Hospitals must be a safe place in which all patients are treated with dignity and respect, including those with dementia. All health professionals have a duty to ensure patient needs are met, working together as a team to deliver the best possible care. Health professionals must be supported to care for patients, with appropriate staffing ratios and time to communicate, diagnose and treat. Hospitals under pressure must find ways of meeting the challenges without sacrificing the patient experience of care.

- **We must redesign services**

We must make difficult decisions about the design of services where this will improve patient care. In some areas, this will require service reconfiguration. Decisions about service redesign must be clinically led and clin-

icians must be prepared to challenge the way services – including their own service – are organised. We must better communicate the need for change to individuals and communities.

- **We must change the way we organise hospital care**

We must reorganise hospital care so that patients have access to efficient, high-quality, expert care regardless of their age or day of the week. This is likely to involve changes to working patterns and the way we organise wards and deploy physicians in hospitals and the community. Patients and their carers must know who to talk to about their care and be supported to make informed decisions.

- **We must review medical education and training**

We must consider whether the way we educate, train and deploy physicians ensures the right balance of general and specialist skills to deliver expert, holistic care for current and future patients. It is vital that all medical professionals have the skills and knowledge they need to care for older patients with complex conditions, frailty and dementia.

- **We must ensure the right mix of medical skills**

We need to make sure that medicine, including emergency and general medicine, remains an attractive career option. The burden of service delivery must not fall disproportionately on one profession, career grade or specialty. It is equally important that consultants and trainees have the skills, knowledge and time they need to make clinically appropriate decisions and communicate with patients.

- **We must renegotiate the New Deal [a package of measures related to the training of junior doctors, see http://www.dhsspsni.gov.uk/scujuniordoc-2]**

We must renegotiate the New Deal to ensure time for training and a fair deal for doctors and patients.

- **We must improve the availability of primary care**

We must ensure the availability of primary care services whenever they are needed, including at the weekend and at night.

- **We must revolutionise the way we use information**

We must create pathways in which information moves with patients across the system in real-time. We must enhance electronic patient records and promote common record standards. Information and systems need to support clinical decision-making, reflective practice, quality improvement and meaningful patient choice.

- **We must embed quality improvement across the system**

We must ensure systems deliver continuous quality improvement, including commissioning structures. Tools such as clinical audits and service accreditation schemes have an important role to play.

- **We must show national leadership**

We must be prepared to make national recommendations and implement national standards and systems where this is in the interest of patient care. Organisations that do not apply national recommendations must be able to demonstrate legitimate reasons for their approach." — Wayne Kondro, *CMAJ*

Complaints rise with expectations

Changing "expectations of the standards expected of doctors" and a change in the relationship between doctors and their patients likely lies at the root of a record number of complaints being filed against physicians in 2011, according to the United Kingdom's General Medical Council (GMC).

Complaints about doctors made to the council increased 23% to 8781 from 7153 in 2010, resulting in 1 in 64 doctors being investigated, as compared with 1 in 68 in 2010, the council states in a report, *The state of medical education and practice in the UK: 2012* (www.gmc-uk.org/The_state_of_medical_education_and_practice_in_the_UK_2012_0912.pdf_49843330.pdf). The GMC continued to receive "proportionally more complaints about men, older doctors and GPs [general practitioners]."

Some 5665 complaints (up 25%) were filed by the general public in 2011, while 1481 (up 6%) were filed by public officials such as police officers, coroners and medical directors, and 1635 (up 33%) were filed by other doctors or health care professionals. Some 4914 complaints were dismissed as having nothing to do with a doctor's fitness to practice as they dealt with such issues as "the side effects of treatment, requests for interventions in treatment or conflicting diagnoses."

Some 3465 investigations were launched, resulting in 93 suspensions and 65 erasures from the physician registry, for such reasons as "substandard treatment, financial deception, false and misleading reporting, incomplete medical records, failure to cooperate with an investigation and fraud."

The meteoric rise in the number of complaints against physicians in recent years is not exclusive to the UK, the report added. "Medical regulators in Belgium and Denmark both reported a notable increase in the number of complaints received. Complaints in Belgium have increased by 22% since 2007 and in Denmark by 88% from 2007 to 2010. In New Zealand, although the number of overall complaints was much smaller, there was a sizable rise in complaints, from 66 in 2010 to 182 in 2011. And in the USA, there was a 7% increase in state medical boards taking disciplinary action against doctors between 2010 and 2011."

The report also indicated that complaints about doctors in the UK are higher than those against dentists, opticians, nurses, midwives and other health professionals. About 73% of complaints were made against male doctors, 47% against general practitioners, 11% against surgeons and 8% against psychiatrists. "Older doctors were more likely to be the subject of a complaint to the GMC, with doctors who qualified 20 years ago or longer being overrepresented in complaints relative to their representation on the register."

The rising number of complaints could be attributable to several factors, the report noted. "There is no evidence that it reflects a deterioration in doctors' ability to communicate — instead they may reflect rising patient expectations and better informed patients who have access to a greater range of information (particularly online). Other fac-

tors such as greater equality in modern society have also influenced people's relationships with professionals, including the patient-doctor relationship and what patients expect from it."

Stereotyping of people with dementia counterproductive

The stigma associated with dementia is a major obstacle in getting people to acknowledge that they have the disease and agree to access what treatment, care and support exists to help them deal with the condition, according to Alzheimer's Disease International.

"Stigma is something which causes an individual to be classified by others in an undesirable, rejected stereotype. Misconceptions of dementia and the people who are affected by it are a problem around the world. Stigma prevents people from acknowledging symptoms and obtaining the help they need. It causes individuals and organisations to behave in ways that are unhelpful, emphasising the symptoms of dementia rather than supporting the abilities that people with dementia have," Marc Wortmann, executive-director of Alzheimer's Disease International, stated in the foreword to *World Alzheimer Report 2012: Overcoming the stigma of dementia* (www.alz.co.uk/research/WorldAlzheimerReport2012.pdf).

People with dementia and their families or informal caregivers indicated in an online global survey of 2500 people from 54 countries that the stereotyping associated with dementia leads to "social exclusion and reluctance to seek help," often causing them to conceal the diagnosis, the worldwide federation of Alzheimer associations adds. "In all stages, the stigma associated with dementia also leads to a focus on the ways in which the person is impaired, rather than on his or her remaining strengths and ability to enjoy many activities and interactions with other people. This deprives the person with dementia of the companionship of family and friends; the resulting isolation and lack of stimulation causes disability beyond that caused by the illness itself."

Doctors, meanwhile, are often loathe to make a diagnosis. "Physicians are reluctant to discuss cognitive symptoms with their patients because of the stigma associated with it and the sense that 'nothing can be done'. Stigma has been identified as a major barrier to seeking a diagnostic evaluation. Moreover, stigmatic beliefs of primary care physicians and therapeutic nihilism lead them to avoid evaluating cognitive function until the illness is so apparent that it cannot be ignored," the report states.

"There is an urgent need for better training of primary healthcare physicians, who are often involved in making a diagnosis of dementia and need appropriate training to do so effectively. Healthcare providers need to adopt specific dementia care philosophies that support independence and are centred on the person with dementia. Community and residential care staff providing frontline services also require specific training to ensure services are delivered appropriately to people with dementia."

The report also recommends that all countries develop "a national Alzheimer's /Dementia plan" that includes such elements as:

- "Attention to physical environment (clear signage)
- Access and consideration for dementia in local businesses and public services
- Development of community based services
- Creation of local groups such as such as support groups and memory cafés involving people with dementia
- Awareness about dementia through local point of information and educational programmes."

Other recommendations include ones aimed at promoting more interaction with dementia sufferers. For example, it urges: "Do not avoid the person with dementia and only talk to the carer. Involve the person in the conversation even if they are less able to participate actively. They are still human; ignoring a person can be offensive."

The World Health Organization (WHO) reported earlier this year that there is one new case of dementia in the world every four seconds, with 7.7 million new cases having been diagnosed in 2010 (http://whqlibdoc.who.int/publications/2012/9789241564458_eng.pdf). WHO projected that globally, there were 35.6 million people with dementia in 2010 and that the tally would double every 20 years to 65.7 million in 2030 and 115.4 million in 2050. — Wayne Kondro, *CMAJ*

The fight against undeserved patents

In hopes of facilitating access to affordable medications in developing countries, Médecins Sans Frontières (MSF) has created an online database to guide patients and civil society groups in battles against "unfair" drug patents.

"Drug companies routinely apply for patents or are granted monopolies on medicines even when these aren't actually deserved," Michelle Childs, director of policy advocacy for the international medical relief organization stated in a press release announcing the creation of the Patent Opposition Database (www.msf.ca/news-media/news/2012/10/msf-launches-online-resource-for-challenging-unwarranted-drug-patents/).

The database is self-described as "a tool which can be used to explore how to challenge unfair patents and their negative impact on access to medicines" (http://patentoppositions.org/).

"Understanding a patent application and the various tactics used by pharmaceutical companies to build them requires technical expertise which can be difficult to find. Fortunately, past experience — some of which is included in this database — shows that this difficulty can be overcome in a number of cases, and a successful system of patent opposition promoted, by collaboration between different parties. Arguments can be replicated, documents can be shared and new alliances can be built between interested parties based all over the world."

Felipe Carvalho, a spokesman for MSF's ACCESS campaign in Brazil, says that the database will be an invaluable tool in the fight against unjust drug patents in developing countries largely due to the international network of

shared contacts and information that will be made available for the first time.

"During the last decade we have been supportive of the use of patent oppositions and what we have observed is that a lot of collaborations have happened among groups from different countries," he says. "There were groups here already advocating for access to medicine but they were not familiar with the use of patent opposition systems."

Carvalho says that the first patent oppositions to medications in Brazil were inspired by similar cases in India, but the sharing of information between civil society groups and patients in the two countries proved difficult. "We are developing this database to put all the useful documents in the same place, to foster contacts between groups working on patent oppositions. We are doing this to help the groups to challenge unwarranted patents so they do not block access to medicines."

The database, which is expected to grow through time, currently contains a searchable list of 45 successful patent oppositions and over 200 other supporting documents that MSF believes will be helpful in building patent oppositions.

The launch of the database marks the 10-year anniversary of the first patent opposition filed by a patient group — Thailand's AIDS Access Foundation — which successfully overturned a patent on didanosine, an antiretroviral used in the treatment of HIV. The Thai court decision set a strong precedent for patient and civil society groups to file patent oppositions against unwarranted drugs worldwide, which led to similar court action in countries such as India, Brazil and currently in several Latin American countries.

MSF argues that many patents can readily and easily be challenged, particularly ones that involve evergreening (making minor modifications such as changing a product from a powder to a pill or adding a compound to an originally patented compound). "A functioning patent system should guarantee that the public at large benefits from any innovation, including medicines. Patents on medicines are supposed to encourage research and development (R&D) for new medicines. But research shows that in recent decades, while profits from patents have gone up, investment in R&D has actually gone down."

MSF relies on inexpensive medicines for its medical relief work in more than 60 countries and in the case of HIV, over 80% of medications used to treat people are generics.

"An unwarranted patent not only delays the entry of price-lowering competition, it also undermines the drive for genuine innovation," stated Childs. "With very few innovative new drugs in their product pipelines, pharmaceutical companies desperately want to stave off generic competition by trying to get more patents on old molecules, or on processes that are not new." — Adam Miller, *CMAJ*

Supreme Court clarifies HIV-disclosure requirements

The legal test used to determine whether to prosecute people who do not disclose their HIV-positive status to sexual partners should not be lowered simply because the disease has become more manageable, the Supreme Court of Canada has ruled.

In a pair of decisions, *R.* v. *Mabior* and *R.* v. *D.C.*, the court ruled that HIV remains an "indisputably serious and life-endangering" disease, so people should continue to be compelled to disclose their HIV status, and be criminally liable for failing to do so, except under certain prescribed conditions, specifically, cases in which their viral load has been substantially reduced by antiretroviral therapy and in which they used a condom during sex.

The unanimous ruling, written by Chief Justice Beverley McLachlin, essentially clarifies the legal standard the court had set in 1998 that is used in determining whether consent to sex is invalidated by failure to disclose HIV status (http://scc.lexum.org/en/1998/1998scr2-371/1998scr2-371.pdf). In that decision, the court had held that the degree of risk of contracting HIV "might" be a factor in determining whether to prosecute someone who did not disclose their HIV status (www.cmaj.ca/lookup/doi/10.1503/cmaj.109-4190). But it did not define the level of significant risk and lower courts subsequently used the ambiguity to undermine the concept of meaningful consent in favour of a more statistical approach in which the likelihood of HIV transmission (i.e., significant risk) is the deciding factor in determining whether to prosecute.

McLachlin ruled in *R.* v. *Mabior* that the significant risk requirement "should be read as requiring disclosure of HIV status if there is a realistic possibility of transmission of HIV," (http://scc.lexum.org/en/2012/2012scc47/2012scc47.html). "This view is supported by the common law and statutory history of fraud vitiating consent to sexual relations, and is in line with Charter [Canadian Charter of Rights and Freedoms] values of autonomy and equality that respect the interest of a person to choose whether to consent to sex with a particular person or not. It also gives adequate weight to the nature of the harm involved in HIV transmission, and avoids setting the bar for criminal conviction too high or too low. If there is no realistic possibility of transmission of HIV, failure to disclose that one has HIV will not constitute fraud vitiating consent to sexual relations under s. 265(3)(c) [of the Criminal Code]. The evidence adduced in this case leads to the conclusion that, as a general matter, a realistic possibility of transmission of HIV is negated if: (i) the accused's viral load at the time of sexual relations was low and (ii) condom protection was used. "

People have a right to refuse to engage in sexual acts and fraud, "whether induced by blatant lies or sly deceit," is still fraud, McLachlin wrote. The test for fraud "boils down to two elements: (1) a dishonest act (either falsehoods or failure to disclose HIV status); and (2) deprivation (denying the complainant knowledge which would have caused him or her to refuse sexual relations that exposed him or her to a significant risk of serious bodily harm). Failure to disclose may amount to fraud where the complainant would not have consented had he or she known the accused was HIV-positive, and where sexual contact poses a significant risk of or causes actual serious bodily harm."

But compelling automatic disclosure of positive HIV status "arguably casts

the net of criminal culpability too widely," she wrote. "People who act responsibly and whose conduct causes no harm and indeed may pose no risk of harm, could find themselves criminalized and imprisoned for lengthy periods. Moreover, this approach seems to expand fraud vitiating consent in s. 265(3)(c) further than necessary, by defining it as simple dishonesty and effectively eliminating the deprivation element of fraud. Finally, this absolute approach is arguably unfair and stigmatizing to people with HIV, an already vulnerable group. Provided people so afflicted act responsibly and pose no risk of harm to others, they should not be put to the choice of disclosing their disease or facing criminalization."

Interveners and AIDS advocates dubbed the ruling a setback for public health and human rights. "We are shocked and dismayed at today's ruling by the Supreme Court of Canada that says that even the responsible use of a condom does not protect a person living with HIV from rampant prosecution," the Canadian HIV/AIDS Legal Network stated in a press release (www.aidslaw.ca/publications/interfaces/downloadFile.php?ref=2055). "The Court's judgments in *R.* v. *Mabior* and *R.* v. *D.C.*, two cases relating to the criminalization of HIV non-disclosure, are a cold endorsement of AIDS-phobia. They will stand as an impediment to public health and prevention, and add even more fuel to stigma, misinformation and fear. And they place Canada once again in shameful opposition to standards set out by international human rights bodies, UNAIDS and the Global Commission on HIV and the Law."

"Criminalizing HIV non-disclosure in this way creates another disincentive to getting an HIV test and imposes a chill on what people can disclose to health professionals and support workers. People living with HIV need more health and social supports; they don't need the constant threat of criminal accusations and possible imprisonment hanging over their heads. Similarly, people not living with HIV need to be empowered to accept responsibility for their own health, and not proceed under a false sense of security that the criminal law will protect them from infection. In short, the Court's actions will have deleterious effects not only on the lives and health of people living with HIV, but on all of us, through fostering a climate of fear and recrimination," the coalition added. — Wayne Kondro, *CMAJ*

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