


## COMMENTARY

# ‘Petrificus Totalus’: Dynamic consent in obstetric practice?

## Technology in obstetric practice, to help supported decision-making

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### 1 | DYNAMIC CONSENT

Dynamic consent (DC) is ‘an approach to informed consent supported by an electronic interface’ that allows patients to ‘revisit and review consent decisions over time’.<sup>1</sup> DC emphasises ‘communication and engagement on information delivered through a variety of media, over time, recognising the importance of catering for various informational needs and ensuring accessibility’.<sup>1</sup> Currently, DC is primarily used in biomedical research, as with the RUDY study and the PEER registry.<sup>1</sup> We argue that DC holds promise to bring about transformative change in obstetric practice.

### 2 | OBSTETRIC CONSENT

Pregnant women and birthing people (‘patients’) have a fundamental right to independently exercise their agency on decisions that affect their bodily integrity. Maternity care, however, presents scope for inconsistency with consent. Women and clinicians, both, are at risk of developing a ‘bias against interventions’ in pregnancy and birth based on notions of ‘normality-centred’ care.<sup>2</sup> Antenatal education in healthcare structures that are ‘biased against complexity’ reinforces the widespread ‘perception that pregnancy and childbirth are largely free of complications’.<sup>3</sup> Studies identify the absence of ‘formal birth preparedness/complication readiness’ during antenatal care in high-resource settings as a concern.<sup>4</sup> Ideological divides over birth often complicate complex decisions around care through pregnancy and labour. The widespread argument ‘that vaginal birth is the natural endpoint of gestation, and therefore requires no

consent’ is not consistent with policy developments that herald more exacting standards in obstetric practice.<sup>4,5</sup>

In the fictional Harry Potter series, ‘Petrificus Totalus’ is a body-immobilising spell that spares the eyes. With regards to informed consent in obstetrics, the truth is stranger than fiction. We witness, spellbound, the full horror of multiple maternity services scandals but appear perplexingly paralysed and resistant to change.<sup>3</sup> Consent at birth remains far removed from the ethical and legal standards that it is meant to meet. The obligation to ‘ensure women have ready access to accurate information to enable their informed choice of intended’ place and mode of birth has never been more relevant than it is today.<sup>6</sup>

### 3 | LAW ON CONSENT

The duty of care owed by clinicians requires that material risks inherent to treatment be disclosed to patients. A failure to warn of material risks may give cause for negligence action, as highlighted in *Chester v Afshar*,<sup>7</sup> where it is noted that a patient’s *right* to be warned about risks ‘ought normatively to be regarded as an important right which must be given effective protection whenever possible’. The landmark *Montgomery v Lanarkshire Health Board* (‘*Montgomery*’) judgement has aligned the law with modern societal expectations.<sup>8</sup> The judgement emphasises that patients are no longer passive recipients of care but must be ‘widely regarded as consumers exercising choices’. The emphasis in *Montgomery* for the ‘dialogue’ over mere lists or consent forms appears to have been reiterated in *Thefaut v Johnston*,<sup>9</sup> where it is stated that a duty is owed to give patients accurate

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information and adequate time and space to make decisions around their care.

#### 4 | IMAGINED POSSIBILITIES

Dynamic consent (DC)-enabled technology offers the ability to bring together hand-held records, consent forms, birth plans and antenatal education on one unitary platform. Imagine a patient, able to view clinical advice from the comfort of their home with animation, infographics, videos and data suitably tailored to their preferences, educational level or attitudes to risk! Clinicians and patients could use decision support tools and clinical calculators on DC platforms to make personalised decisions around care (See BOX 1). Secondary uses of DC apps could include the use of personal information to better manage health resources.

Technologically superior DC-enabled platforms could build on current virtual childbirth education programmes and buttress the validity of information provision through collaborative multidisciplinary professional input. Would a futuristic DC-embedded obstetric practice remain at risk of ideological divisions over physiology and intervention? Consonance in patient information provided through the collaborative endorsement of online content by statutory bodies committed to ensuring high-quality guideline standards, professional colleges, health authorities and national quality control regulators would go some way to ensure that DC meets the expected legal standards for informed consent. Clearly defined medico-legal frameworks to allow dissent or alternative evidence would also help to ensure high standards of accountability.

As end users of maternity services, patient involvement in this process is pivotal to content development. Consumer representation must, however, reflect the aspirations of a broad and diverse patient population to counteract concerns about bias against interventions.<sup>2</sup> DC offers hope for a standard by which health misinformation in maternity care can be robustly countered.

#### 5 | BENEFITS

Obstetric clinical practice necessitates a slew of procedures that require consent. Consent is required each time a patient allows the collection of blood or swabs for testing, allows the fetus to be monitored through cardiotocography (CTG) or agrees to vaccinations. DC may streamline such consent processes and replace assumptions around verbal consent, alerting the patient with each clinical intervention. The patient controls this 'dynamic birth plan' and stays well informed about intended investigations or treatments.

The flexibility offered by DC platforms presents opportunities to transcend communication barriers with patients. Respectful clinical interactions with culturally and linguistically diverse patients in their native language and cultural

milieu will ensure better therapeutic engagement. DC offers benefits with healthcare advocacy too. As an illustration, in communities with a higher prevalence of proscribed cultural practices, such as female genital mutilation, DC can be used as a medium to lead conversations within communities around deeply held traditional beliefs and change attitudes towards such beliefs.

Dynamic consent (DC) improves supported decision-making mechanisms and flattens the hierarchy of power in therapeutic relationships. Clinicians are then able to welcome informed questions from patients and better utilise time-pressured consultations to understand patient motivations around consent or refusal of medical recommendations. Informed refusal of medical recommendations is not uncommon in obstetrics. The right to refuse a medical recommendation exists, even at the risk of death, and is not bound by any rationale or logic that clinicians or society may choose to apply to such choices. DC apps will enhance evidence-based knowledge and reduce the manipulation of the patient towards any specific therapeutic plan.

Electronic DC platforms track the digital trail of changes made to consent by patients. At any point-of-service contact with the patient, logging in to the electronic interface will flag (as with COVID positive results or allergy alerts) consent-related changes to the clinician offering care. Consent change would provide the multidisciplinary team opportunities to explore causes and provide assurance, as required. Technology-led consent-focused conversations would be particularly useful in time-pressured maternity services, where most patients meet clinicians who are unfamiliar to them. Most patients at low risk, receive antenatal care without the involvement of a medical provider. Consent change would also act as a reflex trigger for obstetric involvement to validate the consent process.

#### 6 | PROBLEMS

Dynamic consent (DC) must be recognised as an adjunct and not a replacement for consent. Clinician attitudes towards consent, post-*Montgomery*, reveal sceptical attitudes mired in defensive practice.<sup>10</sup> It is a concern that DC may risk abuse as a substitute for quality discussions in the clinical consultation and defeat the very purpose of what DC is meant to achieve. Technology is meant to serve only as an adjunct for clinicians to explore underlying vulnerabilities, and thus render personalised care possible.

Automation bias poses a concern with technology: against all reason or instinct, drivers have been known to follow the Global Positioning System (GPS) off the road and into the ocean.<sup>11</sup> The innate human tendency to rely on technology to help lead decision making may translate into patients subconsciously taking a passive role in the process, entirely defeating the purpose. This can be a real risk when stressful decisions are made in complex clinical circumstances. Insight into how patients engage with DC-linked information over time and

patient-led documentation of their queries/motivations must guide clinicians through consultations.

Dynamic consent (DC) tools, through the export of health records into individual homes, may disempower patients in ways that are hard to predict. Information provided through a risk-averse lens can overwhelm patients, reduce their faith in their ability to labour, inadvertently cause psychological harm and promote intervention that may not necessarily be desired. Consent conversations on DC platforms may allow the partner easy access to confidential health records and jeopardise women at risk of domestic violence.

Implementing a DC platform is heavily resource intensive. The costs accrue from technology, system maintenance, the development of skill sets in database management, compliance with privacy regulations and updates with cybersecurity. From a holistic perspective though, investment in DC will cement the commitment of health organisations towards transparency with consent (mitigating a common source of litigation) and patient-centred care.

## 7 | PRIVACY

Data protection is a pivotal consideration for all stakeholders in health systems that adopt DC processes. Healthcare data now attracts more cybersecurity attacks than the financial services sector.<sup>12</sup> In an era where smartphones predominate our lives, spyware can infect and extract personal data, track the user's location and use the mobile speaker and camera to record them. Remedy through criminal law will need strengthening to help protect against breach of privacy.

The DC electronic tool promises a superior interface to current paper-based processes. Discrete app functions embedded into DC technology could enable access to help in the event of domestic violence. Such functionality could trigger system-wide alerts and swift intervention from health and law enforcement authorities. The implementation of privacy protection for DC tools is likely to mirror and build upon systems currently in place for digital health records and electronic prescriptions. Privacy locks and two-step authentication, standard with most personal digital tools, already offer enforceable protections. Other technology-specific tools

### BOX 1 Key points

- Informed consent in pregnancy and birth has failed patients, and has contributed to poor outcomes in maternity care
- Dynamic consent offers a new approach to informed consent, through an electronic interface that allows patients to review consent decisions over time
- Dynamic consent offers patients ready access to accurate information and adequate time to process information relevant to their care
- Patients control communication through a 'dynamic birth plan' and stay well informed to make choices on the intended place and mode of birth

such as biometric authentication, network firewalls and aggressive software (as is used in the financial industry) can effectively manage system vulnerabilities and protect access to DC platforms.

Health information, accessed by third parties (such as insurance companies) through corporate contracts may work to the detriment of consumers. Watertight legislation, imposing obligations akin to those expected of healthcare providers, would help regulate corporate use of health data. Corporations invested in DC technology must place privacy at the core of any DC platform, right from the design stage. Public trust in new technology will be won by a pedantic adherence to best-practice standards of personal data management. As clinical processes in maternity care continue to evolve, the multimodal approach to consent, as imagined with DC, holds promise to become the patient-preferred option over traditional paper-based consent.

## 8 | CONCLUSION

Isaac Asimov once famously stated that 'the saddest aspect of life right now is that science gathers knowledge faster than society gathers wisdom'. Maternity carers owe fundamental obligations to inform, listen and meet each patient's expectations around birth. The promotion of normality in childbirth may underplay the risks from vaginal birth and create a bias against interventions, and effectively invalidate informed consent. Dynamic consent offers the opportunity to make real, bespoke care and counselling for patients a possibility. Organisations and professionals must invest in dynamic consent if the much-sought paradigm shift in obstetric consent is to become a reality.

### AUTHOR CONTRIBUTIONS

The release of the Ockenden Report carries huge cultural and practice implications for maternity care, across jurisdictions. One of the essential actions from this report focuses on informed consent. This signals continued deficiencies in this aspect of obstetric practice, despite change having been expected after the *Montgomery* judgement. Dynamic consent offers a radical new approach to informed consent in obstetrics. HA has a special interest in obstetric consent and has undertaken the writing of this article as part of a Masters philosophy programme. AR has extensive experience in diagnosing and treating birth trauma. HE is the guarantor of this article and has supervised, edited and contributed to writing the article.

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## CONFLICT OF INTERESTS

None declared. Completed disclosure of interests form available to view online as supporting information.

## ETHICAL APPROVAL

Not applicable.

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## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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