

Appendix S1. The thirty baseline ethical principles, found in the WHO Guiding Principles, Declaration of Istanbul and Barcelona Principles, distilled and matched to the four underlying Framework Themes.

WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation (2010)	
Guiding Principle	Framework Theme
<p>1. Cells, tissues and organs may be removed from the bodies of deceased persons for the purpose of transplantation if:</p> <p>(a) any consent required by law is obtained, and</p> <p>(b) there is no reason to believe that the deceased person objected to such removal.</p>	<p>Margin of Appreciation</p> <p>Protection</p>
<p>2. Physicians determining that a potential donor has died should not be directly involved in cell, tissue or organ removal from the donor or subsequent transplantation procedures; nor should they be responsible for the care of any intended recipient of such cells, tissues and organs.</p>	<p>Protection</p>

<p>3. Donation from deceased persons should be developed to its maximum therapeutic potential, but adult living persons may donate organs as permitted by domestic regulations. In general living donors should be genetically, legally or emotionally related to their recipients.</p> <p>Live donations are acceptable when the donor's informed and voluntary consent is obtained, when professional care of donors is ensured and follow-up is well organized, and when selection criteria for donors are scrupulously applied and monitored. Live donors should be informed of the probable risks, benefits and consequences of donation in a complete and understandable fashion; they should be legally competent and capable of weighing the information; and they should be acting willingly, free of any undue influence or coercion.</p>	<p>Self-sufficiency</p> <p>Margin of Appreciation</p> <p>Efficacy</p> <p>Protection</p>
<p>4. No cells, tissues or organs should be removed from the body of a living minor for the purpose of transplantation other than narrow exceptions allowed under national law. Specific measures</p>	<p>Margin of Appreciation</p> <p>Protection</p>

<p>should be in place to protect the minor and, wherever possible the minor's assent should be obtained before donation. What is applicable to minors also applies to any legally incompetent person.</p>	
<p>5. Cells, tissues and organs should only be donated freely, without any monetary payment or other reward of monetary value. Purchasing, or offering to purchase, cells, tissues or organs for transplantation, or their sale by living persons or by the next of kin for deceased persons, should be banned.</p> <p>The prohibition on sale or purchase of cells, tissues and organs does not preclude reimbursing reasonable and verifiable expenses incurred by the donor, including loss of income, or paying the costs of recovering, processing, preserving and supplying human cells, tissues or organs for transplantation.</p>	<p>Margin of Appreciation Protection</p>

6. Promotion of altruistic donation of human cells, tissues or organs by means of advertisement or public appeal may be undertaken in accordance with domestic regulation.	Self-sufficiency Margin of Appreciation Efficacy Protection
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Advertising the need for or availability of cells, tissues or organs, with a view to offering or seeking payment to individuals for their cells, tissues or organs, or, to the next of kin, where the individual is deceased, should be prohibited. Brokering that involves payment to such individuals or to third parties should also be prohibited.	
7. Physicians and other health professionals should not engage in transplantation procedures, and health insurers and other payers should not cover such procedures, if the cells, tissues or organs concerned have been obtained through exploitation or coercion of, or payment to, the donor or the next of kin of a deceased donor.	Margin of Appreciation Protection

<p>8. All health-care facilities and professionals involved in cell, tissue or organ [recovery] and transplantation procedures should be prohibited from receiving any payment that exceeds the justifiable fee for the services rendered.</p>	Protection
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<p>9. The allocation of organs, cells and tissues should be guided by clinical criteria and ethical norms, not financial or other considerations. Allocation rules, defined by appropriately constituted committees, should be equitable, externally justified, and transparent.</p>	<p>Margin of Appreciation</p> <p>Efficacy</p> <p>Protection</p>

<p>10. High-quality, safe and efficacious procedures are essential for donors and recipients alike.</p> <p>The long-term outcomes of cell, tissue and organ donation and transplantation should be assessed for the living donor as well as the recipient in order to document benefit and harm.</p> <p>The level of safety, efficacy and quality of human cells, tissues and organs for transplantation, as health products of an exceptional nature, must be maintained and optimized on an ongoing basis. This requires implementation of quality systems including traceability and vigilance, with adverse events and reactions reported, both nationally and for exported human products.</p>	<p>Efficacy</p> <p>Protection</p>
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<p>11. The organization and execution of donation and transplantation activities, as well as their clinical results, must be transparent and open to scrutiny, while ensuring that the personal anonymity and privacy of donors and recipients are always protected.</p>	<p>Margin of Appreciation</p> <p>Protection</p>
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Declaration of Istanbul on Organ Trafficking and Transplant Tourism
(2018 Edition)

Statement	Framework Theme
1. Governments should develop and implement ethically and clinically sound programs for the prevention and treatment of organ failure, consistent with meeting the overall healthcare needs of their populations.	Self-sufficiency
2. Trafficking in human organs and trafficking in persons for the purpose of organ removal should be prohibited and criminalized.	Protection
3. Organ donation should be a financially neutral act.	Margin of Appreciation
4. Each country or jurisdiction should develop and implement legislation and regulations to govern the recovery of organs from deceased and living donors and the practice of transplantation, consistent with international standards.	Margin of Appreciation

<p>5. Designated authorities in each jurisdiction should oversee and be accountable for organ donation, allocation and transplantation practices to ensure standardization, traceability, transparency, quality, safety, fairness and public trust.</p>	<p>Margin of Appreciation</p> <p>Efficacy</p> <p>Protection</p>
<p>6. All residents of a country should have equitable access to donation and transplant services and to organs [recovered] from deceased donors.</p>	<p>Protection</p>
<p>7. Organs for transplantation should be equitably allocated within countries or jurisdictions, in conformity with objective, non-discriminatory, externally justified and transparent rules, guided by clinical criteria and ethical norms.</p>	<p>Efficacy</p> <p>Protection</p>
<p>8. Health professionals and health care institutions should assist in preventing and addressing organ trafficking, trafficking in persons for the purpose of organ removal, and transplant tourism.</p>	<p>Protection</p>

9. Governments and health professionals should implement strategies to discourage and prevent the residents of their country from engaging in transplant tourism.	Protection
10. Countries should strive to achieve self-sufficiency in organ donation and transplantation.	Self-sufficiency
The Barcelona Principles: An Agreement on the use of human donated tissue for ocular transplantation, research, and future technologies (Agreement) (2018)	
Statement	Framework Theme
1. Respect the autonomy of the donor and their next-of-kin in the consent process.	Margin of Appreciation Protection
2. Protect the integrity of the altruistic and voluntary donation and its utility as a public resource for the shared benefit of all.	Self-sufficiency Protection
3. Support sight restoration and ocular health for recipients.	Self-sufficiency Efficacy

4. Promote fair, equitable and transparent allocation mechanisms.	Margin of Appreciation Protection
5. Uphold the integrity of the custodian's profession in all jurisdictions.	Self-sufficiency Protection
6. Develop high-quality services that promote ethical cell, tissue and organ management, traceability, and utility.	Self-sufficiency Efficacy
7. Develop local/national self-sufficient services.	Self-sufficiency
8. Recognise and address the potential ethical, legal and clinical implications of cross-border activities.	Protection
9. Ensure ethical practice and governance of research (non-therapeutic) requiring cells, tissues and organs.	Protection

Appendix S2. Baseline Ethical Principles domain participants and their affiliations.

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Appendix S3. A worked example using the framework questions to consider the ethical principles which need to be considered if implementing Opt-out legislation.

Self-sufficiency

Does the policy promote self-sufficiency?

1. *Reduce organ failure and the need for transplantation?*

No

2. *Increase the number and quality of organs that are transplanted?*

Yes, that's the hope. Increase donor numbers by changing the approach to consent (i.e., that consent is assumed unless the person has opted out).

Margin of Appreciation

Does the policy fall within an acceptable margin of appreciation?

1. *Would this policy be accepted by any reasonable decision-maker with the appropriate expertise and background knowledge to decide if the policy should be accepted?*

No. Considerable debate exists.

2. *If the answer to the first question is No, is this a policy about which reasonable decision-makers can reasonably disagree?*

Yes, we can, and we do disagree, respectfully. Many jurisdictions have successfully and ethically introduced Opt-out legislation; many jurisdictions consider it would not be right for them. Within jurisdictions there are similar differences of opinion.

Efficacy

Will the policy be effective?

1. *What is the evidence base for benefit(s) from the policy?*

Worldwide, mixed evidence. This highlights why not every jurisdiction will seek to introduce.

2. *What burdens or safety concerns does the policy have and to whom?* Protection of vulnerable populations, respecting autonomy, ensuring high awareness levels of any law change.

3. *How does this policy proposal compare?*

Other options exist which may be prioritised instead. For example, strong first-person consent, changing practices regarding family 'overrides,' and promotion campaigns.

4. *What further areas of research and evaluation are required?*

Obligation on all jurisdictions, especially those who implement Opt-out to evaluate and publish, thereby furthering the evidence base.

Protection

What protections are required to ensure:

1. *Respect for people?*

Age requirements, what tissues and organs are (or are not) included, role of family.

2. *Respect for autonomy?*

Ease of registering an opt-out. Ensuring high public awareness levels. Addressing what happens in situations where capacity cannot be established or has changed.

3. *Equity, fairness and justice?*

Meeting the needs of, accommodating, and respecting special populations; especially those within a jurisdiction who disagree with Optout.

4. *Privacy and transparency?*

The register of Opt-out data is both secure and able to be accessed in a timely way by authorized persons.

5. *Professional probity?*

Additional policies and training for healthcare professionals regarding changes in consent practices, addressing questions.

