GPAI / THE GLOBAL PARTNERSHIP ON ARTIFICIAL INTELLIGENCE

AI & PANDEMIC RESPONSE WORKING GROUP REPORT
GPAI – MONTREAL SUMMIT 2020

EXECUTIVE SUMMARY

i. Introducing AIPR

AIPR has 21 members, 15 men and 6 women. Its international experts come mostly from the technical world (e.g. computer science, engineering) and use AI to address complex medical challenges (e.g. medical imaging, bioinformatics, clinical risk prediction, health delivery services). Thirteen members come from the academic sector, 3 work in the private sector, 1 for a non-profit, 3 in the public sector and 1 in an international organization. Sixteen countries or international entities, from Australia to the USA, designated members to AIPR. A better balance will need to be achieved in the future since only diversity and the collaboration of *all* stakeholders will enable our societies to use AI as an efficient lever during pandemics.

ii. Mandate

The GPAI Task Force has invited the Responsible AI Working Group to create an *ad hoc* Working Subgroup, AIPR, to foster and support the responsible development and use of AI-enabled solutions to address COVID-19 and other future pandemics. Concretely, AIPR ensures that methods, algorithms, code and validated data are shared rapidly, openly, securely, and in a rights and privacy-preserving way, in order to inform public health responses and help save lives. AIPR promotes cross-sectoral and cross-border collaboration as well as support engagement with the responsible use of AI among the public and healthcare professionals in the global response to pandemics and public health challenges

AIPR intends to collaborate with other GPAI working groups whenever indicated. For instance, five of its members should take part in the activities of a committee created by the Responsible AI WG to see how AI could support the discovery of new drugs. AIPR will also attempt to conclude partnerships with outside entities to ensure the funding, knowledge and organizational capacity required to fight pandemics with AI is available and leveraged.

iii. Work process

Members of AIPR and members of the Steering Committee that AIPR set up met regularly, from August to November, to develop AIPR's recommendations for the Summit. Following a competitive tender, AIPR partnered with The Future Society (TFS) to assist in the preparation of these recommendations.

iv. Preliminary recommendations and outputs for the Summit

To inform where AIPR could maximise its impact, TFS's report (1) catalogues existing AI tools developed and used in the context of the COVID-19 pandemic for accelerating research, detection, prevention, response and recovery; (2) analyses how these tools are beneficial applications of AI systems to pandemic response, defines best practices and lessons learned, and identifies challenges

to implementing responsible AI principles; (3) makes recommendations on best practices to overcome the challenges identified above, and suggests specific projects to fill gaps and overcome problems detected.

TFS's report contains four main recommendations and a series of sub-recommendations related to the former. The main recommendations state that AIPR could:

1. Co-shape (with other GPAI groups) a Global Health Data Governance Framework to overcome ethical and legal barriers to the development and use of AI in that sector;
2. Support the creation of a central portal to fast-track cross-sectoral and interdisciplinary research;
3. Address current gaps such as social acceptability of AI initiatives and drug treatments;
4. Set up Task Forces to address immediate challenges related to the current pandemic.

(v) Priorities for H1 2021

TFS submitted its final report to AIPR on November 23. In the following 48 hours, members of AIPR assessed the importance of TFS's 4 main recommendations and different sub-recommendations using a 1-5 scale, where "5" meant AIPR experts "strongly approved" a recommendation and "1", "strongly disapproved". Based on the analysis of the answers given by members, AIPR concluded it should focus on 3 priorities in the coming 3 to 6 months (the recommendations prioritized only received scores of "4" or "5" from the participants):

1. To help overcome ethical and legal barriers, AIPR will collaborate with other GPAI Working Groups to facilitate the development of a Global Health Data Governance Framework that will help foster the development of tools that utilize medical data and AI for drug discovery and clinical treatment;
2. AIPR will contribute to the adoption of applications powered by AI (like contact tracing apps) by raising public awareness and supporting pedagogical efforts about these applications's technical settings and the data governance frameworks they rely on;
3. AIPR will consider methods for providing direct support to initiatives that could bring more immediate pandemic relief.

The concrete plan to undertake these projects will be defined by AIPR in the coming weeks.

(vi) Longer term vision

AIPR will use the Summit and the discussions that will take place during the Summit as an opportunity for holding discussions on the longer-term vision AIPR should adopt. That said that vision will rest on two pillars:
1. AIPR plans to keep following a user-driven approach instead of a technology-driven one, that is focus on the most urgent issues met by diverse stakeholders on the ground (e.g., patients, clinicians, policymakers) and on how AI could help tackling them;
2. AIPR will keep paying attention to undertaking applied projects that will help get rid of the main hurdles that impede the development or adoption of AI tools in the field. These hurdles are ethical and legal barriers, difficult access to reliable data and lack of public adoption and credibility of AI.