



Swiss Group for Sustainable Gastroenterology

Recommandations 2023

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Introduction

Healthcare organisations around the world have recognised the significant impact of their operations on the environment, and many are seeking strategies to reduce their environmental footprint (1,2). Consequently, the need for sustainable practices in the field of gastroenterology has been recognised (3-10), and healthcare organisations around the world have edited guidelines (11,13).

Gastroenterology services contribute significantly to healthcare emissions due to a high level of resource consumption including, but not limited to water, energy, and consumables like endoscopy equipment (3,4,10). Therefore, it is paramount to consider sustainability in gastroenterology practices.

Through a comprehensive analysis of existing literature and collaboration with experts from the World Gastroenterology Association, we present a set of guidelines known as the *Swiss Recommendations for Sustainable Gastroenterology 2023*. These guidelines provide a roadmap to integrating sustainable practices into healthcare operations, thereby contributing to a more sustainable healthcare sector overall.

Three working groups have been formed to focus on the key areas of sustainable gastroenterology: *Digitalisation, Sustainable Clinic Operations, and Sustainable Work Practices*. Each group has proposed a set of recommendations that will contribute to minimising the environmental footprint of gastroenterology and promoting sustainable practices in healthcare.

Through this statement paper, we seek to bridge the gap between theory and practice, providing practical insights and recommendations that can be readily implemented in daily gastroenterology workflows. We believe that embracing sustainable practices is not only a responsibility but also an opportunity for positive change in the healthcare industry.

Adopt Digitalisation

Digitalisation has a transformative potential to increase efficiency, reduce waste, and improve patient care. Therefore, the SGSG encourages the implementation of the following:

- **Implement Electronic Health Records (EHRs):** EHRs can reduce paper use, streamline processes, and make patient information more accessible, thereby improving efficiency and reducing waste (14,15). However, implementing EHRs should be approached cautiously to mitigate unintended consequences, such as increased screen time leading to provider burnout (16).
- **Promote Telemedicine:** Telemedicine can reduce the need for travel, thereby reducing associated greenhouse gas emissions (17). Telemedicine can be especially effective for follow-ups and consultations that do not require physical examination. It also offers benefits such as increased access to care for patients in remote areas and reduced waiting times (18).

- **Encourage the Use of Mobile Health (mHealth) Technology:** mHealth apps can promote patient engagement, enhance patient monitoring, and reduce the need for in-person visits. In addition to contributing to sustainable healthcare, mHealth also presents opportunities to improve patient outcomes and satisfaction (18). Pharmaceutical companies should also be encouraged to communicate with professionals through e-mails and e-conferences.

Implement Sustainable Clinic Operations and Services

- **Limitation of unnecessary endoscopies:**

Healthcare providers should aim to decrease unnecessary endoscopies, which in turn reduces resource consumption, decreases costs, and mitigates patient inconvenience and potential risks (19-22). Providers should adhere to established guidelines to identify patients who can safely avoid endoscopic procedures, leaving each provider to its own discretion with the final decision up to the provider.

- **Reduction of waste and resource use:**

Focus on the reduction of single-use devices and the promotion of reusable ones to limit the environmental footprint (3, 4). This might require close cooperation with device manufacturers to design more sustainable equipment. Moreover, it is crucial to promote the reduction of waste generation during endoscopic procedures by using re-processable items and adhering to accurate waste segregation (5,6).

- **Sustainable procurement:**

Sustainable procurement policies should be promoted, which includes choosing products that have a lower environmental impact throughout their lifecycle, from production to disposal. This might involve selecting items with less packaging, items produced from recycled materials, or items that are made locally to reduce transportation emissions (7, 8).

- **Improvement in endoscopy equipment cleaning:**

Cleaning practices of endoscopy equipment should be optimised to reduce the use of water and chemical cleaning agents. Alternative, more environmentally friendly cleaning methods could be considered and discussed with industry and hygiene authority regulations (23, 24).

- **Encourage eco-mobility of people:**

Approximately a quarter of the greenhouse gas emissions generated by a healthcare facility are due to transport of patients and staff. It is essential to limit travel and promote the use of telemedicine, such as for pre-interventional consultations or discussion of medical results. Employees should also be encouraged to use softer means of transport (e.g., public transport, bicycle) and carpooling (1).

- **Limit the energy consumption of endoscopy units:**

Endoscopy units are high consumers of energy for lighting, computers, and endoscopy equipment (9-11). Energy consumption can be reduced by turning off the power supply to light sources, computers, and equipment during inactive phases. To facilitate these measures, a general button to turn off all light sources can be installed. Innovative drying and storage solutions can effectively replace the need for drying cabinets. The installation of LED motion sensor lights is also recommended.

Promote Sustainable Work Practices and Teams, Reducing Turnover and Burnout

- **Creating a supportive and productive work environment:**

Work in gastroenterology demands a multidisciplinary team. It's crucial to offer gastroenterology teams an environment that fosters teamwork, communication, and respect, encouraging dialogue among colleagues and teams. Regular team meetings, mentoring programs, and opportunities for staff to voice their concerns can all help facilitate this. It may seem counterintuitive, but regular breaks can enhance productivity more than continuous work (25). Effective breaks can reduce stress levels, leaving caregivers refreshed and ready to re-focus upon returning to work.



Encouraging staff to take breaks throughout the day and use vacation time can help recharge and prevent burnout (26, 27).

• **Addressing workload concerns and promoting work-life balance:**

Managing workload, organising schedules, and preventing overworking are critical to maintaining a healthy work-life balance. Clinic managers should consider implementing flexible work hours or hiring additional staff and encourage the team to balance their work with personal interests and hobbies outside of work (28). Schedules should address a maximum number of procedures per day and limit incoming calls during consultations and procedures. Encouraging self-care, such as exercise, healthy eating, and adequate sleep, is also vital for team sustainability (26-28).

• **Prioritising professional development:**

Staff should be given opportunities to attend e-conferences, training sessions, and workshops to enhance their skills and prevent burnout (29).

• **Reducing Bureaucracy:**

There is evidence that reducing bureaucracy and streamlining health insurance processes can help prevent burnout among healthcare professionals (28-30). Administrative tasks and dealing with health insurance companies were significant sources of stress for physicians, contributing to burnout. Thus, streamlining administrative processes and reducing the paperwork burden on physicians in gastroenterology may be beneficial (30). This can be achieved by adopting electronic health records (EHRs), delegating administrative tasks to support staff, and minimising excessive health insurance scrutiny (28-30).

Conclusion

The *Swiss Recommendations for Sustainable Gastroenterology 2023* provide a comprehensive roadmap for healthcare professionals and institutions to integrate sustainable practices into gastroenterology workflows.

By embracing digitalisation, sustainable procurement, and promoting sustainable transportation and logistics, healthcare providers can have a positive impact on the environment while improving efficiency and patient care.

Adopting the *Swiss Recommendations for Sustainable Gastroenterology* will help healthcare professionals actively contribute to a more sustainable future for gastroenterology, leading the way for a sustainable healthcare sector overall, contributing positively to both environmental and patient care outcomes.

Summary

Digitalisation

- **Adopt Digitalisation:** Advancements such as electronic health records (EHRs), telemedicine, and mobile health technology can significantly reduce the environmental footprint of healthcare. These innovations also offer potential improvements in efficiency, patient care, and provider well-being.

Sustainable Clinic Operations

- **Sustainable Procurement:** Emphasising the selection of sustainable goods and services, including pharmaceuticals, food, and endoscopic equipment. This involves considering not only the cost and quality of products but also their environmental and social impact.
- **Sustainable Transport and Logistics:** Minimising greenhouse gas emissions associated with patient and staff transport, including promoting telemedicine and eco-mobility options. It also emphasises energy conservation in high-consumption areas, such as endoscopy units.

Sustainable Work Practices

- **Encourage a Supportive and Productive Work Environment:** Fostering a work culture that supports communication, teamwork, and respect, which includes practical measures such as regular team meetings, mentoring programs, and opportunities for staff feedback. Managing workload and schedule organisation can help prevent burnout, promote work-life balance, and contribute to overall team sustainability.
- **Prioritise Professional Development:** Encouraging staff to attend e-conferences, training sessions, and workshops to enhance their skills and prevent burnout.
- **Reducing Bureaucracy:** Streamlining health insurance processes and reducing administrative burden can help prevent burnout among healthcare professionals.

By following these recommendations, healthcare professionals and institutions can make gastroenterology a more sustainable practice, contributing positively to both environmental and patient care outcomes.



Getting Started with the Swiss Recommendations for Sustainable Gastroenterology 2023

Step 1: Understand the Recommendations

Carefully read the recommendations, understand the reasons behind them and the benefits they will bring. The recommendations are designed to improve the sustainability of gastroenterology practices while enhancing patient care and professional wellbeing. If you have any questions or need clarification, don't hesitate to reach out to the contacts provided.

Step 2: Evaluate Your Current Practice

Identify where you currently stand in terms of these recommendations. How many are you already meeting? Where are the gaps? Analyze the current procedures, technologies and resources in your practice. This step will help you understand what changes need to be made and will allow you to prioritize your efforts.

Step 3: Plan

Plan the implementation of these recommendations. Each practice is different, and some recommendations may be easier to implement than others. Therefore, it's essential to develop a customized plan. Prioritize the changes that will have the most significant impact and are easiest to implement. Consider setting short-term and long-term goals.

Step 4: Engage Stakeholders

Involvement and buy-in from all stakeholders are crucial for successful implementation. This includes doctors, nurses, administrative staff, and patients. Communicate the plan and the reasons behind it. Ensure everyone understands their role in this transition towards a more sustainable practice.

Step 5: Train

Invest in training for your staff as required. This could be related to new digital technologies, new protocols, or new equipment. Proper training ensures smooth transitions and helps avoid potential challenges or resistance.

Step 6: Implement and Monitor

Start implementing the recommendations according to your plan. Monitor progress and adjust the plan as needed. Celebrate the achievements and keep motivating all stakeholders to contribute towards the common goal of sustainability.

Step 7: Share your success

Once you've made progress, share your success with others. Your experiences can help others in their sustainability journey. Remember, the journey towards a more sustainable practice is not a sprint but a marathon. It requires continuous effort, and every step, no matter how small, contributes towards a more sustainable future. All the Best!