

Original Article

# International Consensus Statement for Recommended Terminology Describing Hysteroscopic Procedures

Jose Carugno, MD, Grigoris Grimbizis, MD, PhD, Mario Franchini, MD, Luis Alonso, MD, Linda Bradley, MD, Rudi Campo, MD, Ursula Catena, MD, De Angelis Carlo, MD, Di Spiezio Sardo Attilio, MD, PhD, Farrugia Martin, MD, PhD, Sergio Haimovich, MD, PhD, Keith Isaacson, MD, Nash Moawad, MD, Ertan Saridogan, MD, and T. Justin Clark, MB, ChB, MD (Hons), FRCOG

*From the Obstetrics, Gynecology and Reproductive Sciences Department, Minimally Invasive Gynecology Division, University of Miami, Miller School of Medicine (Dr. Carugno), Miami, Division of Minimally Invasive Gynecologic Surgery, Department of Obstetrics and Gynecology, University of Florida College of Medicine (Dr. Moawad), Gainesville, Florida, Cleveland Clinic (Dr. Bradley), Cleveland, Ohio, Center for Minimally Invasive Gynecologic Surgery, Newton-Wellesley Hospital (Dr. Isaacson), Newton, Massachusetts, First Department of Obstetrics and Gynecology, Aristotle University of Thessaloniki (Dr. Grimbizis), Thessaloniki, Greece, Demetra Infertility Center and Villa Cherubini Clinic (Dr. Franchini), Firenze, Department of Public Health, School of Medicine, University of Naples (Dr. Attilio), "Federico II" Naples, Department of Woman, Child, and Public Health, Fondazione Policlinico Universitario A Gemelli IRCCS (Dr. Catena), Rome, Department of Maternal and Child Health and Urological Sciences, "Sapienza" University of Rome (Dr. Carlo), Rome, Italy, Endoscopy Unit, Centro Gutenberg (Dr. Alonso), Malaga, Spain, Life Expert Centre (Dr. Campo), Leuven, Belgium, Spencer Hospitals (Dr. Martin), Margate, Reproductive Medicine Unit, Elizabeth Garrett Anderson Wing Institute for Women's Health, University College Hospital (Dr. Saridogan), NW1 2BU London, Birmingham Women's and Children Hospital and University of Birmingham (Dr. Clark), Birmingham, B15 2TT United Kingdom, and Hillel Yaffe Medical Center, Hadera, Rappaport Faculty of Medicine, Technion Israel (Dr. Sergio), Haifa, Israel*

**ABSTRACT Objective:** To develop a consensus statement of recommended terminology to use for describing different aspects of hysteroscopic procedures that can be uniformly used in clinical practice and research.

**Design:** Open forum discussion followed by online video meetings. Setting: International community of hysteroscopy experts

**Patients:** Not applicable.

**Interventions:** Series of online video meetings to complete a previously established agenda until a final agreement for standardized nomenclature was obtained.

**Measurement and Main Results:** The adoption and implementation of a common terminology to standardize reporting of hysteroscopic procedures was proposed to cover five domains: pain management, healthcare setting, model of care, type of hysteroscopic procedure and the hysteroscopic approach to the uterine cavity. A final agreement was obtained after 3 online video meetings.

**Conclusion:** Hysteroscopy is the gold standard technique for the evaluation and management of uterine disorders. A clear definition and understanding of the terminology used to describe hysteroscopic procedures is lacking. The production of this international consensus statement for terminology to describe hysteroscopic procedures, covering pain management, setting, model of care, type of procedure and hysteroscopic approach, has the potential to enable more effective communication for both clinical and research purposes with the ultimate aim of improving patient care and clinical outcomes. Journal of Minimally Invasive Gynecology (2021) 00, 1–7. © 2021 AAGL. All rights reserved.

**Keywords:** Hysteroscopy; Nomenclature; Office; Operating room

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Corresponding author: Jose Carugno, MD, Obstetrics, Gynecology and Reproductive Sciences Department, Minimally Invasive Gynecology

Division, University of Miami, Miller School of Medicine, Miami, FL 33136.

E-mail: [jac209@med.miami.edu](mailto:jac209@med.miami.edu)

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Hysteroscopy is one of the most common performed procedures in contemporary gynecology and is considered the gold standard endoscopic procedure for the evaluation and treatment of intrauterine pathology [1]. Hysteroscopic procedures are conducted in a variety of healthcare facilities with or without the use of anesthesia/analgesia or in a hospital operating room (theater) with an anesthetist in charge of pain management. The decision where and how to undertake hysteroscopic procedures depends on a number of factors including the available infrastructure (staffing, equipment, facilities), preferences (both patient and clinician), the type of hysteroscopic procedure (i.e. feasibility, acceptability, and effectiveness of diagnostic and operative procedures), and health economics (e.g. reimbursement, investment, and cost-effectiveness). For diagnostic and simple operative procedures such as endometrial polypectomy, procedures performed outside of a formal operating room have been shown to be cost-effective, with a low complication rate, high rates of patient acceptability, and patient's satisfaction [2–6]. More complex and prolonged procedures, such as hysteroscopic myomectomy and lysis of dense adhesions, are generally conducted in a hospital operating room with an anesthetist present.

The structure and delivery of healthcare services vary across national healthcare systems, with differing credentialing requirements, funding, mechanisms for reimbursement, and laws and regulations. These differences have hampered a clear understanding of how contemporary hysteroscopic services are currently being delivered globally and how best to do this. Specifically, there is no consensus regarding the terminology used to describe the different hysteroscopic procedures, including the setting in which they are performed and the model of care (i.e. need for elective hospital admission and length of stay) of the patient undergoing hysteroscopic procedures. Terms such as “in-office,” “outpatient,” “ambulatory,” “day-case,” “in-patient,” and “operating room” are used frequently interchangeably without standardized definition or common understanding.

There is, thus, a pressing need for the implementation of a common terminology to describe hysteroscopic procedures that can be used uniformly in clinical practice and research. The creation and adoption of a standard nomenclature will be helpful for clinicians and patients by allowing the quality and outcomes of clinical practice to be more robustly compared. Furthermore, research studies can be reliably compared, aiding the interpretation and generalizability of findings, as well as facilitating data syntheses (i.e. systematic reviews and meta-analyses).

Therefore, the American Association of Gynecologic Laparoscopists (AAGL), the European Society for Gynaecological Endoscopy (ESGE), and the Global Community of Hysteroscopy (GCH) formed an international working group of experts in hysteroscopy to develop a consensus statement of recommended terminology to use for describing different aspects of hysteroscopic procedures: (1) pain

management, (2) the setting where procedures are conducted, (3) the model of care relating to the length of stay and need for admission, (4) the type of procedure, and (5) the approach to hysteroscopy.

## **Materials and Methods**

In June 2018, concerns about the lack of a standardized nomenclature to describe hysteroscopic procedures was identified by a group comprising 5 expert hysteroscopists from Europe and the United States. The need to create a nomenclature that objectively and uniformly defined hysteroscopic procedures prompted this group to create a larger working group of leading international hysteroscopists to identify areas in which a standard nomenclature was lacking.

In December 2018, 70 gynecologists with extensive experience in hysteroscopic procedures were selected to represent the international community. An email was distributed among the members of this group enquiring about identified areas of current hysteroscopic practice that, in their opinion, needed a common terminology. On January 31, 2019, a preliminary proposal regarding areas of hysteroscopic practice where standard nomenclature was needed—namely, pain management, procedural setting, the model of care, and approaches to hysteroscopy—was drafted. This broad, preliminary consensus was presented and discussed at the GHC in Barcelona, Spain, in June 2019, at the ESGE annual scientific meeting in Thessaloniki, Greece, in October 2019, and at the Annual Global Congress of the AAGL in Vancouver, Canada, in November 2019.

After this wide consultation, the AAGL, the ESGE, and the GCH created an international working group of 15 experts in hysteroscopy with the objective of revising the preliminary draft and prepare a consensus statement for terminology to be used for hysteroscopic procedures. Each scientific organization contributed with 5 members in the group including practicing clinicians and researchers who had demonstrated leadership and expertise in hysteroscopic procedures.

A total of 3 online video meetings took place from April to June 2021 in which a final agreement for standardized nomenclature was obtained. The process for arriving at a consensus was as follows. Where there was consensus about terminology for a particular area of hysteroscopic practice, the statements were adopted and revised only for editorial reasons. Where consensus could not be achieved, the proposed statements were removed, and members of the working group had the opportunity to provide verbal and written comments and suggestions and to propose changes. These statements were revised accordingly to encompass the views of the working group members. The revised statements, including alternative statement options where applicable, were disseminated in advance of the next online meeting and subsequently discussed in that forum. If voting failed to reach a consensus, the same process was followed

**Table 1**

Overview of terminology for hysteroscopy	
Pain management	<ul style="list-style-type: none"> <li>• Level 1</li> <li>• Level 2</li> <li>• Level 3               <ul style="list-style-type: none"> <li>○ Level 3(a)</li> <li>○ Level 3(b)</li> </ul> </li> <li>• Level 4</li> <li>• Level 5</li> </ul>
Setting	<ul style="list-style-type: none"> <li>• Office</li> <li>• Outpatient clinic</li> <li>• Operating room</li> </ul>
Model of care	<ul style="list-style-type: none"> <li>• Office</li> <li>• Outpatient</li> <li>• Ambulatory</li> <li>• Extended recovery</li> <li>• Inpatient</li> </ul>
Type of procedure	<ul style="list-style-type: none"> <li>• Diagnostic hysteroscopy</li> <li>• Operative hysteroscopy</li> </ul>
Approach of procedure	<ul style="list-style-type: none"> <li>• Vaginoscopy</li> <li>• Speculum- assisted</li> </ul>

before and during the third and final online working group meeting. Where members could not attend the online meetings, their written opinions were sought in advance to allow formulation of consensus of the whole group.

## Results

The adoption and implementation of a common terminology to standardize reporting of hysteroscopic procedures was proposed to cover 5 domains: pain management, healthcare setting, model of care, type of hysteroscopic procedure, and the hysteroscopic approach to the uterine cavity. A summary of the terminology is given in [Table 1](#), and more detailed descriptions are provided in the subsequent sections.

### Pain Management

Technological advances have led to the miniaturization of hysteroscopes and ancillary instrumentation, which has facilitated the conduct of procedures without the need for anesthesia or with the use of local genital tract anesthesia alone. The feasibility of conducting procedures without the need for conventional general or regional anesthesia is dependent on several factors both clinical and nonclinical, and these include the type of procedure, patient preferences, clinician expertise, the available instrumentation and infrastructure, and how health services are reimbursed and regulated.

Thus, the management of pain is a key consideration when undertaking hysteroscopic procedures and needs to be clearly and consistently reported. A hierarchical description of pain management, consisting of 5 levels, is recommended ([Table 2](#)).

**Table 2**

Levels of pain management used during hysteroscopic procedures	
Level 1	No medication or the use of oral non-sedative medication
Level 2	Local anesthetic to the genital tract
Level 3	Conscious sedation
Level 3 (a)	• Oral or inhalational medications with a sedative effect
Level 3 (b)	• Parenteral medications with a sedative effect
Level 4	Regional anesthesia
Level 5	General anesthesia

Pain management should be defined according to the highest level of intervention used to control pain if combined therapies are used.

### Setting

There is currently no common understanding on the best terminology to define the setting in which hysteroscopic procedures are carried out. Terms such as “in-office,” “outpatient,” “ambulatory,” “day-case,” and “in-patient,” “operating room” are used without standardized definition and often incorporate both the place (facility) where procedures are conducted and whether patients are admitted and how long they stay for.

In order for a clearer understanding of the procedural situation, it is recommended that the setting is defined in alignment with the “International Association for Ambulatory (Day) Surgery (IAAS) Suggested International Terminology and Definitions [7]” and according to the level of pain management that is feasible in the facility where the hysteroscopic procedure is performed ([Table 3](#)). This categorization recognizes that the level of pain management is not related to the environment (hospital, surgical center,

**Table 3**

Definitions of the setting for hysteroscopy	
Office*	The hysteroscopic procedure is performed in a medical practitioner's professional premises where pain control up to level 3(a) can be administered.
Outpatient clinic*	The hysteroscopic procedure is performed in a healthcare facility for the management of outpatients, e.g., hospital, community clinic or a freestanding surgical center where pain control up to level 3(a) can be administered.
Operating room	The hysteroscopic procedure is performed in a fully equipped operating theater where pain control up to level 5 can be administered.

\* In some countries, in compliance of local legislation, pain management up to level 3(b) can be administered in an office or outpatient room setting. In such exceptional circumstances, the setting can be described as office or outpatient clinic rather than operating room, but the reported clinical data should report that level 3(b) pain management was used, including type of pain management administered and route of administration.

**Table 4**

Model of care for hysteroscopy	
Office*	The model of care will be considered as “office” when the patient arrives and leaves a medical practitioner’s professional premises, which provides an appropriately designed, equipped, and serviced room(s), on the same calendar day.
Outpatient*	The model of care will be considered as “outpatient” when the patient arrives and leaves the facility (outpatient clinic/department of a hospital, community clinic, or a freestanding surgical center [public or private]) on the same calendar day.
Ambulatory	The model of care will be considered as “ambulatory” when the patient undergoing the hysteroscopic procedure is admitted to a facility (hospital or surgical center) and discharged on the same calendar day.
Extended recovery	The model of care will be considered as “extended recovery” when the patient is admitted to a facility (hospital or surgical center) with discharge the following calendar day with a length of stay of less than 24 hours.
Inpatient	The model of care will be considered “inpatient” when the patient is admitted to a facility (hospital or surgical center) and discharged not sooner than the following calendar day, with a length of stay of at least 24 hours.

\* In the United States, the terms “office” and “outpatient” are used interchangeably as regards the model of care.

community clinic, or office) where the hysteroscopic procedure is performed and is not dependent on the need for admission or dictated by the planned length of stay.

### Model of Care

To enable clarity over the definition of setting for hysteroscopy and ensure consistency with the IAAS definitions [7], it is recommended that the need for admission, the length of stay, and type(s) of facility should be used to define the “model of care” under which the hysteroscopic procedure is undertaken (Table 4).

### Type of Procedure

Hysteroscopic procedures can be diagnostic and /or therapeutic (operative). Diagnostic procedures aim to visualize the uterine cavity to detect or exclude endometrial and structural abnormalities (congenital and acquired) with or without tissue sampling (blind or directed biopsy). Operative procedures remove endometrial and myometrial uterine pathologies with the aim of providing a therapeutic benefit by alleviating gynecological symptoms as well as allowing histologic analysis of removed tissue. The suggested

**Table 5**

Type of Hysteroscopy	
Diagnostic hysteroscopy*	A hysteroscopic procedure to evaluate the uterine cavity/cervical canal with or without targeted biopsy (under hysteroscopic visualization).
Operative hysteroscopy†	A hysteroscopic procedure to treat uterine pathology or symptoms arising from the uterus under direct hysteroscopic visualization using hysteroscopic instruments.

\* The use of hysteroscopy is not intended for the evaluation and management of the patient with cervical cancer or its precursors.  
† “Blind” intrauterine procedures, such as an endometrial ablation procedure without hysteroscopic visualization or insertion of intrauterine hormonal devices, should not be considered an operative hysteroscopy according to the proposed classification. However, studies describing such uterine procedures should report pain management, setting, and model of care as described in the preceding sections.

terminology recommended to distinguish the type of hysteroscopic procedure is shown in Table 5.

### Approach of the Hysteroscopic Procedure

The traditional approach conducting hysteroscopy to access the uterine cavity consist of inserting a vaginal speculum to visualize the cervix, which is then grasped with a toothed forceps (tenaculum/vulsellum) to provide counter traction when dilatating the cervical canal and subsequently introducing the hysteroscope through the cervical canal and into the uterine cavity under direct visualization. This technical approach was consolidated after the introduction of hysteroscopy to routine gynecological practice in the 1990s, when procedures were generally conducted exclusively under general or regional anesthesia. Advances in surgical technology and, in particular, miniaturization of endoscopes and ancillary instrumentation has allowed hysteroscopy to be performed without the need for vaginal instrumentation because cervical dilatation is not routinely required. This progression allowed hysteroscopy to be undertaken without the requirement for an anesthetist or a formal hospital operating room (theater), and hysteroscopy conducted in more convenient and accessible office and outpatient clinic settings became established.

Once office/outpatient clinic hysteroscopy became established, some practitioners began using techniques that did not require conventional vaginal instrumentation with specula and forceps [8–12]. The hysteroscope was passed directly into the vagina, avoiding unnecessary pain induced by vaginal distension and manipulation/traction of the cervix. Subsequent clinical trials and data syntheses have demonstrated the benefits of such approaches in terms of reducing pain and enhancing patient experience [10,13].

**Table 6**

Approach to hysteroscopy	
Vaginoscopic	The hysteroscope is steered into the cervical canal without the use of a speculum and/or stabilizing forceps to facilitate the visualization of the cervix and entry into the cervical canal and uterine cavity.
Speculum-assisted	The hysteroscope is steered into the cervical canal with the use of a speculum and/or stabilizing forceps to facilitate the visualization of the cervix and entry into the cervical canal and uterine cavity.

**Table 7**

Proforma for documenting and reporting hysteroscopy			
Setting	Pain management		
Office	<input type="checkbox"/>	Level 1	<input type="checkbox"/>
		Level 2	<input type="checkbox"/>
Outpatient clinic	<input type="checkbox"/>	Level 3 (a)	<input type="checkbox"/>
		Level 3 (b)	<input type="checkbox"/>
Operating room	<input type="checkbox"/>	Level 4	<input type="checkbox"/>
		Level 5	<input type="checkbox"/>
Approach	Type		
Vaginoscopic	<input type="checkbox"/>	Diagnostic	<input type="checkbox"/>
Speculum-assisted	<input type="checkbox"/>	Operative	<input type="checkbox"/>
Model of care	Admission		
No admission			
Office procedure	<input type="checkbox"/>	Ambulatory procedure	<input type="checkbox"/>
Outpatient procedure	<input type="checkbox"/>	Extended recovery procedure	<input type="checkbox"/>
		Inpatient procedure	<input type="checkbox"/>

Check one option from each of the 5 domains: setting, pain management, approach, type, and model of care.

It is recommended that the approach to hysteroscopy, namely, how the cervix is visualized and accessed to enable entry into the cervical canal and uterine cavity, is defined according to whether vaginal instrumentation is used or not (Table 6).

### Documentation and Reporting

A proforma to report hysteroscopic procedures according to this nomenclature is presented in Table 7.

### Discussion

Hysteroscopy is considered the gold standard procedure for the diagnosis and management of women with

intrauterine pathology and is one of the most common interventions in contemporary gynecological practice [1]. Despite its ubiquity, there has been a lack of consensus when describing hysteroscopic procedures such that multiple terms are used across the international community without any clear definition as to what they mean. This lack of clarity has caused confusion and hindered reliable interpretation of clinical data and scientific communications pertaining to the practice of hysteroscopy. Moreover, robust comparisons of hysteroscopic procedures have been compromised, as have the ability to synthesize data in systematic quantitative reviews to help inform clinical practice. By producing standard nomenclature for 5 fundamentally important areas of hysteroscopic practice, we hope that practitioners will find this consensus statement relevant and easy to adopt when reporting hysteroscopic procedures in both daily clinical practice and research studies. To aid use of this nomenclature, a standard proforma has been provided to report hysteroscopic practice in a systematic way according to the pain management used, the procedural setting, the model of care adopted, the type of procedure, and finally, the approach to conducting the hysteroscopy (Table 7). This reporting proforma is highly recommended to be used in publications to allow comparisons and future meta-analysis.

Contemporary hysteroscopy is performed in a variety of healthcare settings using different methods of pain control. Hysteroscopic procedures using smaller diameter endoscopes and improved operative technologies are increasingly being performed without the use of general anesthesia in variety of facilities. Avoidance of regional or general anesthesia is associated with a decrease rate of complications, faster recovery times, high rates of acceptability, equivalent effectiveness, and greater cost-effectiveness [3,14]. However, pain associated with such hysteroscopic procedures limits the feasibility of such procedures and can adversely affect patient experience [15–18]. Alternatively, the use of highly sedative medications or regional/general anesthesia necessitates the presence of an anesthetist and invariably a formal operating room. Thus, the working group agreed that in modern hysteroscopy, it is important to clearly define and report the pain control measures adopted and the procedural setting. Consensus was reached about a hierarchy of pain control measures relevant to hysteroscopy and that the procedural setting should be defined according to the level of pain control used in conjunction with the type of facility where the hysteroscopy was undertaken. To allow greater clarity in regard to what was meant by procedural setting, the length of stay and plan for admission to a specific healthcare facility did not inform the definition of setting but rather was kept distinct and reported within a separate “model of care” category.

The working group felt that the type of hysteroscopic procedure should be dichotomized into diagnostic procedures and those where the hysteroscope was directly used to treat uterine conditions or remove intrauterine

pathologies. Finally, the group believed that the approach to hysteroscopy, namely, the technique to visualize and traverse the cervical canal to access the uterine cavity should be reported in a standard fashion. This was in recognition of the miniaturization of endoscopes and ancillary equipment over time that has facilitated hysteroscopic procedures being performed without the need for any other vaginal instrumentation, namely, vaginal specula or forceps applied to the intravaginal cervix [11,12]. These “vaginoscopic” approaches are quicker and less painful [10,13].

The strengths of this consensus statement include the initial wide, international consultation to identify key areas where common definitions or hysteroscopic practice were needed and the subsequent formation of a working group of practicing expert clinicians and researchers by the 3 leading organizations in the field. This group produced and finalized the standard nomenclature by consensus after several iterations of the proposed statements and classifications until overall consensus was reached. Weaknesses of our approach include that we did not conduct a systematic literature search to identify published literature pertaining to standardized reporting of hysteroscopy. However, our literature searches did not find such papers, and our international panel of leading experts in hysteroscopy were unaware of any standard nomenclature. Despite the international make-up of the working group, not all geographic areas were represented. Furthermore, our consensus was not reached using a highly structured approach, such as adoption of a formal Delphi process [19]. These methodological weaknesses may limit the validity and utility of the recommended hysteroscopic terminology. However, a consensus method very close to the expert panel technique was used as clearly described in the Materials and Methods session, and we believe that the group had adequate international representation and enough clinical and research expertise in hysteroscopy to be cognizant of the current variations in terminology and reporting within global clinical practice and the international, published medical literature.

We anticipate that wide, international adoption of this standard terminology will vastly enhance communication in the field of hysteroscopy. In turn, this will facilitate better understanding of clinical practice, the conduct and feasibility of techniques, and the cost-effectiveness of hysteroscopic interventions. Clinical and research collaborations will be facilitated, and data syntheses will be supported to robustly inform clinicians and patients.

## Conclusion

Hysteroscopy is the gold standard technique for the evaluation and management of uterine disorders and is widely used in modern gynecological practice. However, a clear definition and understanding of the terminology used to describe hysteroscopic procedures is lacking. The production of this international consensus statement for terminology to describe hysteroscopic procedures, covering pain

management, setting, model of care, type of procedure, and hysteroscopic approach, has the potential to enable more effective communication for both clinical and research purposes, with the ultimate aim of improving patient care and clinical outcomes. A summary of the standard terminology describing hysteroscopic procedures is provided in the Supplemental Appendix.

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## Supplementary materials

Supplementary material associated with this article can be found in the online version at <https://doi.org/10.1016/j.jmig.2021.10.004>.

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