1. General information

1.1 General information

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<td>Funding round:</td>
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1.2 General project details

**Project title:**
Provide a descriptive title that identifies the type of research, project, and/or topic. The title contains, if applicable: research design/project setup, objects/elements of the research/project, intervention(s), diversity/gender.

**Project type:**
Which phase of the knowledge chain does your project focus on?
More information and examples about the ZonMw knowledge chain can be found in the document ZonMw-kennisketen.

<table>
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<th>Strengthening Transgender Care for Adolescents: Co-creating an Optimal Decision-making Framework</th>
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<td>Has this or a comparable grant application previously been submitted to ZonMw?</td>
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<tr>
<td>Has this application also been submitted to an organisation other than ZonMw?</td>
<td>No</td>
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</tbody>
</table>

1.3 Required project members

You are required to add the following 3 project group members:

- **Main applicant:** This is the person who is (ultimately) responsible for the grant application. During the grant awarding process, the main applicant is the contact person with whom ZonMw communicates about the application.
- **Project leader and secretary:** This is the person who is responsible for content and in daily charge of the project. When the application is granted, the project leader is the contact person for correspondence, regarding the progress of the project.
- **Administrative representative:** This is a legal person or natural person, who is authorized to represent the organization based on the statutes. This person is authorized to enter into financial obligations on behalf of the organization.

Please note (1): For ZonMw, the person submitting the application is by definition the main applicant. You cannot submit an application for your colleague, in which your colleague is the main applicant. If someone other than yourself is the main applicant on this application, that person must create their own account on mijn.zonmw and submit the application from that account.

Please note (2): the main applicant and the administrative representative must be employed by the same organisation. If this is not the case, a collaboration agreement with respect to the implementation of the application for the grant in question must be concluded.

Please enter the address of the organisation where the project group members are employed, never their private addresses.

**Main Applicant**
Complete or update your personal
data. Please add a '.' (dot) after your initials.

Title (academic): dr.  
Initials: A.L.C.

Middle name (tussenvoegsel): de

Last name: Vries  
Suffix: MD PhD

Preferred language: Dutch. Further communication will be in Dutch. If you have difficulty understanding the Dutch language please select 'English'.

The name, department and address of the research organisation:

Organisation: Amsterdam University Medical Centers, location VUmc  
Department: Department of Child & Adolescent Psychiatry,

Street and house number: PO Box 7057,  
Postcode: 1007MB

City: Amsterdam  
Position: anders/other

Is the main applicant also the project leader? If not, please enter the details of the project leader below. Yes

Administrative representative

Title (academic):  
Initials:  

First name:  
Prefix:  

Last name:  
Suffix:  

Email  

The name, department and address of the research organisation:

Organisation: Amsterdam University Medical Centers, location VUmc  
Department:  

Street and house number: Boelelaan 1117  
Postcode: 1081HV

City: Amsterdam

2. Summary

2.1 Public summary in Dutch

Please draft two public summaries of your proposal: one in English and one in Dutch, between 50 and 100 words each. If your application is successful, the public summaries will be used in NWO publicity surrounding the announcement of the grant award decisions.

Please keep the following guidelines in mind:

- Use comprehensible, everyday language and be as specific as possible. For example, do not write ‘the mechanism underlying apoptosis will be examined’ but ‘the researchers will use microscopes to look for the reasons for spontaneous cell death’.
- Do not write in terms of ‘we’ and ‘us’ but use terms like researchers, biologists, literary specialists, etc.
- Write the summary in such a way that you feel you ought to be including terms like ‘basically’, ‘put simply’, ‘roughly speaking’ and ‘in lay terms’ – but do not actually include them!
- As institution, list the institution that has provided the embedding guarantee.

Examples of public summaries:

Ratten op reis
Dr. A.A.E. van der Geer, Naturalis
The magnetic brain: Alzheimer's disease seen through iron
Dr. L. Bossoni, LUMC, Radiology Department – Biophysics

Abnormal accumulation of iron is found in the brains of patients suffering from several different neurodegenerative diseases, but its potential toxicity is still not understood. This research uses a new multidisciplinary approach to detect and characterize different forms of iron, also leading to new in vivo methods of visualization.

Please note that the public summaries are different from the scientific summary you drafted.

The magnetic brain: Alzheimer's disease seen through iron
Dr. L. Bossoni, LUMC, Radiology Department – Biophysics

Abnormal accumulation of iron is found in the brains of patients suffering from several different neurodegenerative diseases, but its potential toxicity is still not understood. This research uses a new multidisciplinary approach to detect and characterize different forms of iron, also leading to new in vivo methods of visualization.

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Please note that the public summaries are different from the scientific summary you drafted.

2.3 Comprehensive summary in English

Make sure to provide an informative and relevant abstract as this is the first part of your proposal that reviewers will read (max. 300 words excl title).

The once revolutionary ‘Dutch model’ of adolescent transgender care, which includes the use of puberty blockers, is currently being challenged. Clinics providing medical transgender care for youth are confronted with overwhelming increases in referrals, partly driven by older (age 14+) birth assigned females, within a context where public and expert critics have become more vocal, expressing concerns about decision-making ability of adolescents and the limited evidence base for the current care model.

To address these challenges, I propose to 1) investigate if childhood versus adolescent onset developmental pathways can be distinguished and correlate these with treatment outcomes 2) gain insight in optimal decision-making processes in gender affirmative treatment for transgender adolescents, parents and health care providers and to 3) integrate findings from aim 1 and aim 2 and co-create an optimal decision-making framework for transgender care for adolescents.

I propose a mixed-method study consisting of three work packages (WP1, WP2, WP3) making use of the unique Amsterdam Cohort of Gender Dysphoria Adolescent (ACOG-Ado), which offers unprecedented opportunities for addressing the current dilemmas in adolescent transgender care.

WP1 will provide the missing evidence for the Dutch treatment model. Using existing baseline data (n = 2000+) and newly collected young adulthood follow-up data (n = 700+), WP1 will use a qualitatively participatory approach involving transgender adolescents, their parents and care providers to shed light on their perspectives, desires and needs around decision making in medical transgender care. WP3 will integrate the new data evidence of WP1 with the normative ethical knowledge of WP2 into an optimal decision-making framework whereupon an advanced adolescent transgender care model can be based.

2.4 Keywords

Please specify no more than five key words for the project.

Keyword 1: Transgender
Keyword 2: Adolescents
Keyword 3: Evidence base
3. Project information

3.1 Main discipline

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| Medicine sub-discipline: | Medical specialisms ==> Psychiatry, medical psychology |

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3.2 Extension clause

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Please add the date of the confirmation e-mail (talent@nwo.nl, previously: vi@nwo.nl) that the extension was granted. An extension is only necessary if you exceed the year limit on the reference date.

4. Financial data

4.1 Summary of the budget

For the sake of a clear overview of the project application within the system, we also ask you to fill in a summary (totals on main items) of this budget. You can do this by clicking on the link “Add Project Costs” below. You will then be taken to a screen where this summary of the project budget can be entered.

The Explanatory Notes mention which costs can be covered under the Vidi scheme. Costs for infrastructure (accommodation and office automation, such as computers/laptops) are non-reimbursable.

When you have finished entering the project budget you can close it and continue later. Once the total is entered you must submit this summary. After submitting the budget, the summary will show the amount requested of ZonMw. This allows you to verify that you actually submitted the budget and not just saved it.

Once the project budget has been submitted, you will see the amount you are applying for from ZonMw under the summary of the project budget. This amount is the total project budget.

Click here to enter the summary of your budget:

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It is important that you submit the budget in MijnZonMw. After you have done this the requested amount should be visible below. Is the requested amount visible? In that case you can check 'Yes'.

4.2 Budget - Staff

The maximum amount of a Vidi grant is € 800,000, to be spent over a period of five years. If the proposed research is of shorter duration, the maximum grant amount will be reduced accordingly.

Budget table please note:
- Use one row each for each staff member. Additional rows (as many as you need) should be added underneath the bold print headings, listing all persons separately.
- Years are Project Years. For example: if your intended starting date is 1 October 2022, then Year 1 ranges from 1 October 2022 to 30 September 2023.
- The Explanatory Notes mention which costs can be covered under the Vidi scheme. Costs for infrastructure (accommodation and office automation, such as computers laptops) are non-reimbursable.
- The applicant’s total FTE (Vidi + other tasks/projects) cannot exceed 1.0 FTE at any time during the project.

* WP = Scientific staff; NWP = Non-scientific staff; please also list the nature of the post (for example PhD student or postdoc researcher)
** Please list the time you will spend on your Vidi, including any FTE percentage that your host institution will pay of your salary for your work on this Vidi project. If your host institution pays for (part of) the time you spend on your Vidi, please include this information under co-financing.

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4.4 Budget

Below you can upload the specified project budget. You can use the budget forms via the ZonMW website. Click for the forms

Please upload your specified budget here (PDF format):

4.5 Co-financing

Does the project involve co-financing?

4.6 Question is not applicable.

4.7 Grant recipient's contribution

The grant recipient's contribution is a contribution from the organization of the administrative representative. This contribution can be in kind, in cash or a combination of both

Grant recipient's contribution:

4.8 Are there other parties besides the organization of the administrative representative that will receive money if this project is awarded funding?

4.9 Question is not applicable.

4.10 Explanatory notes

* Please justify each cost item in the contribution requested from ZonMw, with a brief explanation.

4.11 Question is not applicable.

5. Annexes
5.1 Annexes

We kindly ask that you attach the requested documents below. Please bear in mind the permitted file format (e.g. PDF) and the permitted file size (max. 5 MB).

Please upload the Vidi Grant application proposal form 2021 as a pdf file. Please make sure the Explanatory notes are not visible in the pdf version of your application form. In order to achieve this you may either remove the Explanatory note text boxes, or collapse the Explanatory notes in the word document before converting to pdf. Please check your file after converting it to pdf. For the non-referees, please supply us with the name, organisation and contact details. You may indicate up to three non-referees. Please upload the information as a pdf file.

Research proposal:  

Non-referees:  

Embedding guarantee:  

Statement exceeding the maximum amount of funding:  

Declaration of approval for submitting a grant application

The Declaration of approval for submitting a grant application must be signed by the administrative representative and the main applicant. The signed statement can be added here immediately or sent by e-mail to the relevant program secretariat no later than one week after submission.

6. Declarations and signature of applicant

6.1 Permits

Please indicate the permits you need to implement the project. Please also indicate, for each required permit, whether it has been applied for or has already been granted.

- Research governed by the Dutch Medical Research Involving Human Subjects Act (WMO; *Wet medisch-wetenschappelijke onderzoek met mensen*) must be reviewed beforehand by an accredited METC (Medical research ethics committee) or the CCMO (Central Committee on Research Involving Human Subjects).
- Is an Animal Testing Project Permit (CCD/DEC; Central Authority for Scientific Procedures on Animals) required?
- In certain cases, a permit is required to carry out population screening. This is laid down in the Dutch Population Screening Act (Wbo; *Wet op het bevolkingsonderzoek*).

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<tr>
<td>Permit under the Wbo</td>
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6.2 Declarations

I have completed this form truthfully. ☑ Yes

I agree that ZonMw will process my application and make my data visible to committee members, reviewers and other parties for the purpose of assessing my application. See https://www.zonmw.nl/en/privacy. ☑ Yes

I will comply with the Biosecurity Code as well as all relevant codes of conduct and guidelines that apply in the profession. You can find more information at https://www.zonmw.nl/en/news-and-funding/funding/codes-of-conduct/. ☑ Yes

I have submitted the completed and signed embedding guarantee. ☑ Yes

If applicable: I have submitted non-referees. ☐ Yes
| If applicable: I have included one or more authorised letters from the prospected host institution and/or a third party, guaranteeing to meet part of the costs of this research project. | Yes |
Health Research and Development (ZonMw)

Strengthening Transgender Care for Adolescents: Co-creating an Optimal Decision-making Framework

2. Research Proposal

2a. A description of the proposed research

2a1. Overall aim and key objectives

The development and dissemination of the Dutch transgender care model

Society’s understanding and acceptance of gender diversity has changed dramatically in recent years. Meanwhile, adolescent transgender clinics are overwhelmed by referrals (1-3) and current estimates also show an increase in prevalence (1.2-2.7%) (4,5). The term transgender is mostly used as an umbrella term for all forms of gender diversity (including non-binary, gender fluid, gender queer, etc). Gender Incongruence (GI) and Gender Dysphoria (GD) are the diagnostic terms used in the ICD-11 and DSM-5, respectively (6,7). All refer to the incongruence between experienced gender identity, one’s sense of being male or female or another gender, and the sex assigned at birth.

Adolescent transgender care is a relatively new field that is rapidly developing. It has its roots in the Netherlands and I have been at the forefront of what has become known as the ‘Dutch model’ (8). It includes early medical intervention and is at present the internationally dominant care model (9, 10) and was shown to have positive effects in my first longer-term evaluation studies (11,12) and in recent other outcome publications (13,14). Puberty blocking, with no permanent effects, relieves the acute psychological distress of transgender youth when they experience the physical changes of puberty. It provides time and rest before making decisions regarding masculinizing or feminizing hormones and gender affirming surgeries with life-long consequences (15).

Controversies and challenges

The increased visibility, acceptance and availability of medical gender affirming care is a positive development in a society that embraces diversity and tolerance. Meanwhile, transgender care for adolescents is surrounded by challenges and uncertainties, since medically intervening in a developing adolescent body remains an essential though controversial component of transgender care. Threats to providing affirming medical care exist in various countries. In Sweden, pediatric endocrinologists no longer prescribe blockers out of concern of the limited evidence base (16). In the US, various states have laws that criminalize this care (17). In the UK, the High Court ruled that youth under 16 cannot give informed consent which resulted in a year-long halt of providing puberty blockers to any transgender young person until the Court of Appeal overturned this ruling (18,19).

Possible new developmental pathways and treatment outcomes

A topical concern involves the limited evidence base for the care model, especially for the more recent referred adolescents. In a recent study we conducted a time trend analysis of key characteristics in our cohort between 2000 and 2016 (1). Contrary to expectations, no changes in characteristics were observed (demographics like age, family situation, level of gender dysphoria, psychological functioning), apart from a relative larger increase in birth assigned females (1). This observation is shared with other clinics (20,21,22). In a more detailed analysis of these data, we found that these birth assigned girls tend to present relatively more in later adolescence (unpublished data, see Figure).
A key concern is whether these ‘older’ birth assigned girls may present with a ‘new’ form of (rapid or sudden) onset adolescent GI/GD (23), who may regret their treatment and detransition later (24,25). We need more insight in the diversity of developmental pathways (26) and associated psychological difficulties (27). An earlier version of the classification system (DSM-IV-TR, 28) included subtyping according to sexual orientation, a typology that has been used in several studies and revealed some association with treatment outcome (29, 30). The current DSM-5 no longer has these subtypes. I want to examine whether an early childhood onset versus later adolescent onset GI/GD can be distinguished and how this relates to characteristics within the adolescent or the adolescent’s environment and outcomes of affirming treatment (e.g. family support, peer support, autistic traits, self-esteem / body image) (31). I want to further broaden our conceptualizations on GI/GD presentations and subtypes. What constitutes good decision making in adolescent transgender care

According to the current guidelines, one of the important criteria for medical affirming treatment is that a youth should have the capacity to consent to the specific treatment step that is indicated (9,10). I have shown that the vast majority of transgenders adolescents can be considered competent to consent to start puberty suppression (33). Yet adolescents, parents and health care providers encounter several ethical dilemmas, such as fertility consequences and the age at initiating treatment (34). When reflecting on earlier treatment decisions, both adolescents and parents acknowledged for example that they had not fully understood all consequences of blockers (34). Ethical support tools may be of help for aforementioned dilemmas (35). Meanwhile, youth, adolescents and their parents report an explicit wish to be more engaged in treatment-associated decisions (36). This confronts both parents and clinicians with ethical challenges on what good decision-making in gender affirming treatment should comprise. How, by whom and when should decisions on medical affirming treatment be made?
RO4. Explore the perceptions, desires and needs of transgender adolescents (as well as young adults reflecting on their treatment), their parents and health care providers in adolescent transgender care decision making (WP2).

Originality and innovative character

Finally, The Amsterdam Cohort of Gender Dysphoria Adolescent (ACOG-Ado), the largest and oldest, is a unique cohort and does not exist anywhere else globally. It is the only cohort that can address the current questions in transgender adolescent care. No other transgender cohort can provide longitudinal data so many now adult people. By this project, I will continue our line of innovative research and care, which will reinforce the position of the Netherlands as a lead country in care for transgender youth.

Methods and techniques

Setting: Center of Expertise on Gender Dysphoria

The Center of Expertise of Gender Dysphoria (CEDG) in Amsterdam is a multidisciplinary transgender clinic offering all stages of care (psychological assessment and support, puberty suppression, gender-affirming hormones and surgeries). It holds the ACOG-ado cohort, consisting of all consecutively assessed Dutch adolescents (from start of puberty up until age 17) referred since 2000 (37). Currently, 200 new adolescents are assessed yearly and the complete cohort consists of >2000 cases with baseline data, of whom 75% started medical affirming treatments; 700 are now in their adult years (>20).

The CEDG has strong connections with transgender advocates and self-support organizations. I have been in contact with them on many occasions and know many of them personally. Transgender self-advocates have been reading this proposal and commented on the content. Transgender adolescents and their parents will be invited to be part of a multidisciplinary advisory group connected to this project. For interviews, focus groups and the participatory research part of the study, transgender adolescents, parents and health care providers will be invited through the CEDG’s network.
WP1 (6-32 months): quantitative prospective cross-sectional and longitudinal questionnaire approach

WP1 entails the quantitative prospective longitudinal questionnaire study. Since the start of the cohort, a set of questionnaires and a self-constructed survey were rigorously collected at baseline, during treatment after start puberty suppression and post-treatment, in young adulthood (11).
WP2 (6-32 months): qualitative dialogical ethical participatory action research approach

RO4. Explore the perceptions, desires and needs of transgender adolescents (as well as young adults looking back), their parents and health care providers in adolescent transgender care decision making.

WP2 employs a qualitative, dialogical ethical participatory action research design. Action research with children has proven to be suitable to get an understanding of, and at the same time improve patient experiences (56, 57). In this project, participation will be defined as an iterative process in which all relevant actors enter into mutual dialogue (58). Within this process, the perceptions, desires and needs of each actor should be given proper weight. Particular attention will be paid to the perspectives of the ones most affected by the decisions within the process, in this case, the adolescents. Furthermore, this process will lead to action and change, a practical end. It will be ascertained that adolescents feel able and free to express their needs and wishes (58). The cyclical, iterative process implies that findings and reflection from one phase of the research provide input for the next phase; data are continuously interpreted, analyzed, shared with stakeholders and reflected on. Importantly, stakeholder groups, in this case transgender youth, their parents and their clinicians, will first be consulted separately to be able to develop their own stance and voice, and are then brought together to discuss and (where possible) integrate perspectives (59).

RO4 What is viewed as good decision making;
-Individual interviews will be performed with 10 of each group or until saturation is reached (60): 1) adolescents early in their transgender care process, 2) parents, 3) transgender young adults who can reflect on their trajectories, and 4) health care providers from different disciplines. Interview topics involve their experiences and desires on decision making and their roles in this process.

WP 3 (36-60 months) integrating the results of WP1 and WP2, developing an optimal decision-making framework

ROS. Integrate the findings of RO3 and RO4 and co-create an optimal decision-making framework for transgender care for adolescents e.g. a tailored care model, a shared decision-making model, a decision-making support tool.

This part of the study follows up on the findings of WP1 and WP2. In WP3, the evidence-based outcomes of WP1 and the normative perspectives as identified in WP2, are integrated.
Aim of these focus groups is to come to a formulation of what good decision making should entail 1) in daily clinical practice, e.g. what values and norms should guide this process and 2) while developing guidelines and general policies regarding adolescent transgender care (e.g. nationally and internationally). Based on these findings, a guidance or support tool might be developed. After all, the consequences of empirical data for ethical theory and vice versa are not determined by the researcher, but established in the dialogue in which researchers just act as facilitators (59).
2a3. Motivation for choice of host institute.

**Reasons for choosing this particular research group**
There is no other center to conduct the proposed project. The CEDG in Amsterdam, that holds the ACOG-Ado cohort, has a long history of providing transgender care and was among the first to deliver transgender care for children and adolescents. At present, the CEDG is among the largest in the world with over 80 professionals providing multidisciplinary transgender care. It has an excellent network of national and international partners. Like me, members of the team have always participated and continue to be actively involved in writing (international) guidelines and serve as active members of international transgender care professional associations (e.g., WPATH, EPATH). Research of the CEDG Amsterdam has delivered important and relevant evidence for those guidelines since its inception.

2b. Scientific and/or societal impact of the proposed project (Knowledge utilisation)

This study is urgently needed to navigate the challenging times in transgender adolescent care. Although the focus of the project is on the societal and clinical impact, it will also have scientific impact.

**Societal impact:**
The outcomes will be influential in the current debate on whether the increase in referrals constitutes a new developmental pathway of gender incongruence and whether this should have treatment implications. The project is focused on providing an improved evidence base for the offered clinical care. Elucidating whether there is an adolescent onset type apart from a childhood onset type of gender incongruence will answer an as urgent experienced question in transgender care.

This way, these results will have direct clinical consequences.

On a conceptual and normative ethical level, the project will shed light on the existential question what good transgender care should encompass. The current care model, once revolutionary, is challenged and might not fulfil its current-day expectations, leaving both the care providers and the care takers (the adolescents and their families) with unfulfilled treatment questions. This project seeks to find why there is friction between offered care and satisfaction with that care.

An important societal influence will be that the used measures and analyzed factors will be determined not only by researchers and clinicians, but also by the transgender youth and their parents. They will participate in the study and co-create the assessment package.

This participatory aspect of the project will further have large societal impact since instead of a top-down approach wherein clinicians and researchers determine what good clinical care should consist of, the proposed project will take a participatory approach. Transgender youth will have input during the study process and when interpreting the results. While the quantitative longitudinal part of the study will provide more evidence
base for clinical care, the qualitative participatory activation research part of the study will provide a much better alignment of treatment desires and expectations of transgender youth and their families with the offered treatment. The optimal decision-making framework will direct how to advance the once so welcomed but now sharp criticized approach. For the organization of care the results can help identifying at an early stage of assessment who will profit from extensive assessment and all steps of medical gender affirmation, for whom fewer diagnostics and only parts of medical affirming treatment suffice, or for whom (additional) mental health support or no intervention at all might be more appropriate. The societal impact of the results of the study will also be on the formulation of local, national and international clinical guidelines for transgender youth. Locally, treatment protocols at the CEDG are constantly evaluated and adapted based on recent research evidence and societal changes, and this project will give a direct impulse to such adaptations. Nationally, this project will give input to the ‘kwaliteitsstandaarden’, the Dutch national guidelines for somatic and mental health transgender care. Also, they will provide relevant knowledge to the “kwartiermaker transgender care” that is assigned by the Dutch Ministry of Education, Culture and Science in collaboration with transgender interest associations, transgender care providers, insurance companies and policy makers, to address waiting list and other care access problems in transgender care. The societal impact of the results of the study will also be on the formulation of local, national and international clinical guidelines for transgender care. Locally, treatment protocols at the CEDG are constantly evaluated and adapted based on recent research evidence and societal changes, and this project will give a direct impulse to such adaptations. Nationally, this project will give input to the ‘kwaliteitsstandaarden’, the Dutch national guidelines for somatic and mental health transgender care. Also, they will provide relevant knowledge to the “kwartiermaker transgender care” that is assigned by the Dutch Ministry of Education, Culture and Science in collaboration with transgender interest associations, transgender care providers, insurance companies and policy makers, to address waiting list and other care access problems in transgender care.

**Scientific impact:**

The project will improve the understanding of variations in gender identity development as seen in clinical practice evolving over time. These novel statistical approaches (esp. Gaussian Mixture Modelling and Network Intervention Analysis) can lead to identification of not earlier recognized subtypes of transgender experiences. The long-term outcomes give possibility to identify differences in treatment outcomes and shed light on recent developments and not yet acknowledged contextual factors that might affect these outcomes. Scientifically, collecting and coordinating the data of the ACOG-Ado cohort will enable other parties to collaborate and continue or start their research project. The Amsterdam CEDG has strong connections with other transgender clinics both in the Netherlands (e.g. Radboud Nijmegen, BovenIJ Zaandam, Genderteam Zuid NL) as well as around the world. Internationally the ENIGI (European Network for the Investigation of Gender Incongruence, UZ Ghent Belgium, Tavistock London UK) already resulted in a list of important and relevant publications on adult transgender care, and is now also focusing its attention to adolescent care. The findings may serve as source of identification of areas in transgender adolescent care that deserve more attention in research. With the involvement of transgender adolescents and their parents, we will use the found results to address newly identified difficulties and challenges that may arise during medical affirming treatment.

**2c. Number of words**

Section 2a: Wordcount: 3945
Section 2b: Wordcount: 951

**2d. Literature references**


17 The Guardian, April 7 2021, Arkansas is first state to ban gender-affirming treatments for trans youth, retrieved from https://www.theguardian.com/society/2021/apr/06/arkansas-transgender-youth-gender-affirming-treatment-ban

19 Dyer C. Children are "highly unlikely" to be able to consent to taking puberty blockers, rules High Court. BMJ. 2020 Dec 1;371:m4699. doi: 10.1136/bmj.m4699. PMID: 33262132.


57 Dedding C, Jurrius K, Moonen XMH, Rutjes L (Editors) Kinderen en jongeren actief in wetenschappelijk onderzoek: Ethiek, methoden en resultaten van onderzoek met en door jeugd, Utgeverij Lannoo nv, Tielt, 2013


2e. Data management section

Data collected are suitable for reuse.

Where will the data be stored during research?
The data will be stored at a protected research file at the Amsterdam University Medical Center location VUmc ICT system. Before analyzing and merging the files, data will be anonymized and safety and privacy regulations will be taken care of.

After the project has been completed, how will the data be stored for the long-term and made available for the use by third parties? To whom will the data be accessible?
Data will be made available and accessible to interested parties after request and appointments are made about safety and privacy.

Which facilities do I expect to be needed for storage of data during and after research?
To enable further use of the data, data files will be stored at the Amsterdam University Medical Center location VUmc ICT system at a protected research file. When further research is applied for, the study coordinator and data manager of the Adolescent Amsterdam Cohort of Gender Dysphoria will enable admission to the anonymized files.
4. Curriculum Vitae

4a. Academic profile

General
Having trained as a child and adolescent psychiatrist at the University Medical Center Utrecht, I got the opportunity to develop a consultation-liaison psychiatry service at the Pediatric department of the VU University Medical Center (VUMc) in Amsterdam. Recently, this service merged with the Academic Medical Center (AMC) into the Amsterdam University Medical Centers (Amsterdam UMC). I am full staff member of the department of child and adolescent psychiatry of the and participate in teaching medical students, nurses and pediatric and child and adolescent psychiatry residents. An important and special part of my work has always been dedicated to transgender adolescents, not only clinically, but also management and research. With the support of a personal ZonMw OOG research grant (specifically meant for clinicians in mental health bridging research to clinical work), I obtained my PhD on “Gender Dysphoria in adolescents, mental health and treatment evaluation”.

Position in the field
Since I was introduced in the field of transgender care and research by Professor in Psychology and pioneer Peggy Cohen-Kettenis, I have become one of the most respected and well published professionals in the field myself. I am able to move the transgender field forwards, as pointed out for example by my role as the co-chair of the adolescent section of the World Professional Association of Transgender Health Standards Of Care (SOCS) revision committee. The SOC are the guiding international transgender care guidelines and the section on adolescents’ care in the current revision concerns the most challenging one. I am a founding Board Member and current President-Elect of the European Professional Association of Transgender Health (EPATH). We organize biennial scientific meetings attended by 700 people. I served as a member of the DSM-5 text revision (to be published, APA 2021) Committee on Gender Dysphoria, as Board Member and interim Chair of the Amsterdam Center of Expertise on Gender Dysphoria (CEDG) and was co-author of national transgender care guidelines (kwaliteitsstandaard transgender psychische zorg, kennisdossier genderdiversiteit bij kinderen en adolescenten). I serve as an editorial board member of The Archives of Sexual Behavior, International Journal of Transgender Health and LGBT Health and as associate editor of the Journal of Sexual Medicine.

Academic achievements and research focus
Since obtaining my PhD regarding transgender adolescents, I continued to work in this field, combining clinical and managerial responsibilities with research. My research always has a direct link to clinical practice. Apart from my key publications mentioned below, I wrote various relevant clinical consensus papers (e.g., de Vries 2012), co-edited a book (Kreukels, de Vries, & Steensma, 2013), co-edited a special issue of the International Review of Psychiatry (Bouman, de Vries & Tsjoen, 2016). I participate in the academic discourse and wrote commentaries and editorials that were cited also by the non-academic press (de Vries 2020, de Vries, 2021). At present, I supervise four PhD students and two post-doc fellows on lines of research that all focus on important gaps in the literature on transgender adolescent health: 1) the co-occurrence of autism and gender dysphoria, 2) informed consent of transgender adolescents, 3) long-term follow-up into middle adulthood, 4) sexual health, and 5) developmental pathways. Two additional PhD students are about to start. Two of my PhD students have finished their projects.

Collaborations and networking capabilities
This year, I was co-applicant on a granted ZonMw open competition proposal for a 4-year project “Navigating uncertainty in gender incongruence and differences in sex development (DSD)” aiming to understand uncertainty in transgender and DSD care. This is an interdisciplinary collaboration between Amsterdam UMC and Radboud UMC Nijmegen. Earlier, I was involved as co-investigator in two international collaborations, one European study funded by the European Union entitled ’Dsd-LIFE; clinical European study on the outcome of surgical and hormonal therapy and psychological intervention in differences of sex development (dsd).’ Also, I was PI on a study funded by the Dutch Ministry of Education, Culture and Science: ‘A field trial on the proposed Gender Incongruence classification for the WHO International Classification of Diseases 11th edition’. These projects resulted in several co-authored and two first author papers.

Motivation
Transgender adolescents drew an interest in me that has never subsided. It touched my longstanding curiosity in child development and psychological functioning. In a field where there is a paucity of knowledge regarding mental health and treatment outcomes, it sparked my scientific mind to find evidence for the pioneering
approach I was offering. Gradually, I have developed a growing interest in the ethical and societal implications of my work. I have come to realize that improved evidence-base for medical gender affirmation alone will not provide the full answers based on which we make our medical decisions. Knowing that withholding such treatment is not a neutral option and that a randomized controlled trial is impossible (the golden standard of providing evidence base), transgender care in essence will always face ethical and justice challenges. After all, the core request of children with gender identity issues is that they want to be and express who they are, a wish that, according to the United Nation’s Childrens Rights, need to be acknowledged.

Academic and societal potential
My scientific involvement with the cohort from the very beginning provides me with the unique knowledge and capacities for unravelling many yet unanswered questions in transgender care. My clinical involvement with the day-to-day medical decisions that have to be made provide me with the possibilities of hearing the topical issues as well as bringing the scientific knowledge into practice. My broad international network provides me with the possibilities of bringing the outcomes into international practice guidelines. National and international media have always shown interest in my work (NOS journal, Undark, Economist, der Spiegel, BBC 1, Medscape, Volkskrant, National Geographic, RTL Late Night, Le Monde, Parool, De Wereld Draait Door) and will provide me with the possibility to present my work to society at large.

Wordcount: 964

4b. Key output


   This landmark paper was an extension of my thesis, published in 2014 and still the only long-term follow-up of transgender adolescents starting medical treatment at a young age. This still frequently cited influential article was the second of my two publications which showed the positive effects for transgender adolescents of a clinical approach that includes puberty suppression. Gender dysphoria resolved and psychological functioning and general well-being improved to levels comparable with same-age peers in young adulthood. Although recent years have seen a few other shorter-term follow-up studies, no other studies have followed adolescents into young adulthood and this paper serves to date still as the main evidence for the offered clinical approach worldwide.


   This article is key in a line of research on Decision making capacity in Transgender adolescents that I employed at our adolescent transgender cohort. It is one where we show that, when systematically measured, most adolescents are deemed capable of giving consent.


   This article is a multi centre result of the field trial on the “gender identity disorder” diagnosis in the Netherlands’, a validation and reliability study on the proposed Gender Incongruence classification for the WHO International Classification of Diseases 11th edition, each resulting in several co-authored and this first author paper.


   This article examined whether consecutively transgender clinic-referred adolescents between 2000 and 2016 differ over time in demographic, psychological, diagnostic, and treatment characteristics. Against the
background of recent sharply increased referral rates that might reflect changes in sample characteristics, this is one of relevant studies on the Adolescent Transgender Cohort.


Following my frequently cited 2010 publication “Autism Spectrum Disorders in Gender Dysphoric Children and Adolescents” a new line of international research on the link between autism and gender dysphoria evolved. This is one of the articles of my PhD student further unraveling this co-occurrence, by investigating an autistic population.


This article describes the demographic and treatment characteristics of the combined child, adolescent and adult cohort of referrals to the Center of Expertise on Gender Dysphoria Amsterdam since 1972. It is an example of the uniqueness of this cohort and the possibilities it offers for research.


This is an article that evolved out of a Master thesis project at the adult psychiatry department on shared decision making in adult transgender care, a project where I am in the advisory group.


This article on sexuality of transgender adolescents evolved from data collected during my own PhD project. Results showed that their sexual experiences lacked behind compared to same age peers but that many adolescents still have romantic relationships.


This article was one of the ‘type 1 papers’ of the dsd LIFE project; descriptive papers that investigated the main outcome measures across 14 centers in 6 European countries concerning 1022 participants. Other important outcome papers of the project which I co-authored were on Gender Dysphoria and Sex Change, Sexuality and Body Image. This project learned me how to internationally collaborate with other centers.


This article is still one of the most cited one on the autism – gender incongruence link; it was the first to detect an increased co-occurrence and postulated most explaining hypotheses still studied. It was the first of a new line of research on the link between gender diversity and autism.

Wordcount: 632 (excl. output titles and references to the output)
## 5. Administrative details

### 5a. Personal details

<table>
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<tr>
<th>Title(s), initial(s), surname(s)*:</th>
<th>A.L.C. de Vries, MD, PhD</th>
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### 5b. Master's degree ('doctoraal')

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### 5e. Work experience since completing your (first) PhD

List your appointments chronologically. The bottom row should contain your current position.

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### 5f. Months spent since completing your (first) PhD (include a calculation)
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If applicable: You may mention special circumstances (e.g. due to COVID-19) that account for a reduction in productivity (max. 100 words):

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