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# Sustainable Cultural Heritage Planning and Management of Overtourism in Art Cities: Lessons from Atlas World Heritage

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Abstract: In recent years, there has been an increase in international tourist arrivals worldwide. In this respect, Art Cities are among the most favorable tourist destinations, as they exhibit masterpieces of art and architecture in a cultural environment. However, the so-called phenomenon of overtourism has emerged as a significant threat to the residents' quality of life, and, consequently, the sustainability of Art Cites. This research aims to develop a management toolkit that assists site managers to control tourism flows in Art Cities and World Heritage Sites and promotes the residents' quality of life. The research methodology was developed within the framework of the Atlas Project in 2019. In this project, five European Art Cities, including Florence, Edinburgh, Bordeaux, Porto, and Santiago de Compostela, discussed their common management challenges through the shared learning method. After developing selection criteria, the Atlas' partners suggested a total of nine strategies as best practices for managing overtourism in Art Cities in multiple sections of accommodation policies, monitoring tactics, and promotional offerings. The Atlas project was conducted before the outbreak of the COVID-19 virus pandemic. Based on the current data, it is somehow uncertain when and how tourism activities will return to normal. The analysis of the Atlas findings also highlights some neglected dimensions in the current strategies in terms of environmental concerns, climate change impacts, crisis management, and cultural development plans, which require further research to boost the heritage planning process.

**Keywords:** overtourism; Art Cities; World Heritage Sites; management strategy; heritage planning; sustainability; Atlas World Heritage

## 1. Introduction

According to the recent data published by the World Travel and Tourism Council (WTTC), the tourism industry accounts for 10.4% of the world's GDP, making it one of the largest economic sectors worldwide [1]. In 2018, the Travel and Tourism sector experienced a 3.9% growth, outpacing that of the global economy (3.2%) for the eighth consecutive year [2]. International tourist arrivals have increased from 25 million globally in 1950 to 278 million in 1980, 674 million in 2000, and 1235 million in 2016 [3]. As estimated by the United Nations World Tourism Organization (UNWTO), international tourist arrivals worldwide are expected to increase by 3.3% a year between 2010 and 2030 to reach 1.8 billion by 2030 [4]. However, the projection was made before the outbreak of the COVID-19 virus

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pandemic, and based on the current data, it is somehow uncertain when and how tourism activities will return to normal.

In 2018, the Oxford English Dictionary defined the word "overtourism" as "an excessive number of tourist visits to a popular destination or attraction, resulting in damage to the local environment and historical sites and in poorer quality of life for residents" [5]. Overtourism describes destinations where hosts or guests, locals or visitors, believe that there are excessive numbers of tourists and that the quality of life in the area or the quality of the experience has deteriorated unacceptably [6–8].

Almost half of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Heritage Sites are located in Europe [9], and European Art Cities increasingly attract numerous visitors worldwide by exhibiting prestigious works of art and architecture in a cultural environment. Currently, Europe is the most visited continent in the number of international tourist arrivals. In this respect, the European Union's information in 2017 suggested that a total of 28 member states accounted for 40% of the international arrivals with significant growth of 8% [10]. The growth of tourism in Art Cities could also be explained as one of the consequences of globalization, which has facilitated the free movement of capital and people [11]. Tourism is not only an industry with well-known financial benefits, but also with the potential for supporting conservation efforts in Art Cities and World Heritage sites [12]. Many studies have developed discussions around the novel conservation approaches [13,14] and the promotion of Sustainable Tourism in Art Cities and World Heritage Sites [15,16]. Furthermore, a few scholars recognize tourism development as an essential tool for the conservation of historic minority quarters [17,18].

Although tourism promotes economic development and cultural exchange [19], Art Cities and World Heritage Sites have limited capacities to adapt to overtourism due to its multidimensional and complex structure [20]. Many Art Cities across the world are suffering from the consequences of overtourism, often resulting in a loss of cultural identity and environmental degradation [21]. Additionally, the uncontrolled growth of visitors poses a severe threat to the integrity, authenticity, and quality of life in cultural heritage sites [22]. Nowadays, the number of cultural destinations that raise the alarm of overtourism has steadily increased [5]. In this respect, the development of new technologies and the creation of low-cost services have increased tourism levels, like cheap flights, cruise liners, vacation apartments, honeypot festivals, place reviews on social media, and travel recommendations [23,24].

Overtourism is the opposite of Sustainable Tourism, which is about using tourism to create more pleasant places to live in and more enjoyable destinations to visit. Additionally, the perception of overtourism as a threat is generally recognized higher in cities in comparison with rural areas [25]. A survey on 26,000 residents in Europe in 2017 revealed that approximately two in five believed that overtourism poses a severe threat to the conservation of cultural heritage sites. They assume that tourists do not contribute sufficiently towards their economy, as they often buy fake products or do not pay adequately for food and drinks in the local restaurants or coffee shops [26]. Some residents claim overtourism has disrupted daily activities and the cultural identities of their cities through fast growth of tourist accommodations in neighborhoods, visitor noise pollution, drunken behaviors in public spaces, and security-related concerns [27]. For instance, Barcelona estimates that there were 30 million overnight visitors in 2017, compared to a resident population of 1,625,137 [28]. The dissatisfaction with overtourism in the city led to writing mottoes of discontent on the walls, like "Barcelona is not for sale" [29]. Overtourism in Barcelona has driven real estate prices much higher in the property market. This means the city's residents are obliged to borrow higher amounts of loans to buy a house or to pay more expensive rent for their accommodations [30]. A 2019 research in the Historic Center of Florence revealed that 70% of the participant residents believed that finding affordable housing is "difficult" in the city due to the tourists' high demands. They also agreed that many job opportunities were created for serving tourists, and seasonal changes in visitor flows make it "difficult" to find a stable job in this Art City [11]. In Rome, overtourism has affected the quality of life in many districts of

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the city by increasing heavy traffic and air pollution, although the Italian government has drafted many regulations to overcome these issues [31].

The UNWTO argues that overtourism is not itself a threat to a destination; it depends on how site managers control tourist flows in destinations [32]. However, as the tourism industry considers tourists' satisfaction and relies on the economic aspect of development, residents and their priorities are often neglected in many Art Cities. Hence, it is the responsibility of cultural heritage planners and site managers to balance between these two [15,16,33]. For instance, in spite of the importance of rethinking the concept of sustainability in tourism as a holistic principle of democracy and residents' rights [34], some places still intend to welcome and host more tourists than they are qualified to accommodate. This research, therefore, aims to develop a management toolkit that helps cultural heritage planners and site managers to control overtourism in Art Cities and World Heritage Sites, and, consequently, improve the quality of life of residents.

#### 2. Materials and Methods

## 2.1. Research Framework

The "Atlas World Heritage—Heritage in the Atlantic Area: Sustainability of the Urban World Heritage" was funded by Interreg Europe in 2019 [35]. In this project, five European Art Cities, including Florence, Edinburgh, Bordeaux, Porto, and Santiago de Compostela, adopted the shared learning method to identify the best management practices for dealing with overtourism in Art Cities. Table 1 presents the detailed information of the world heritage sites included in the Atlas project.

World Heritage Site (WHS)	Area (ha)	Buffer Zone (ha)	Year of Inscription	Resident Population in WHS
Historic Center of Florence	505	10.480	1982	45,000
Edinburgh	444.4	N.A	1995	23,546
Bordeaux	1.731	11.974	2007	86,943
Porto	51	186	1996	5095
Santiago de Compostela	107.59	216.88	1985	10,984

**Table 1.** The World Heritage Sites included in the Atlas project [36].

# 2.2. Research Steps

In the early stages of the project, Atlas partners developed selection criteria to identify the best management practices in terms of overtourism. Then, each of the partners presented their best practices based on the created criteria. The possibility of using strategies in other tourist destinations was among the significant considerations during the selection of best practices by the Atlas partners. In the third step, we reviewed the approaches to identify the neglected dimensions in the proposed strategies. Finally, based on the results obtained from the Atlas project, on the one hand, and project analysis, on the other hand, the management toolkit was recommended (Figure 1).

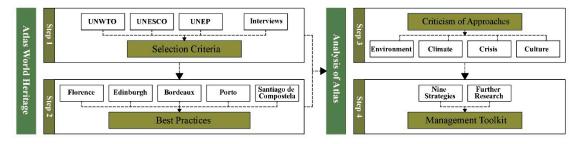


Figure 1. The research methodology designed by Atlas findings and the project analysis.

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#### 3. Results

#### 3.1. Selection Criteria

In the early stage of the project, selection criteria were created and organized based on the contribution of Santiago de Compostela "Diagnosis Study of Urban WH Sites in the Atlantic Area" [37]. This report develops the selection criteria based on the recommendations of international organizations, which are explained in the following.

# 3.1.1. United Nations World Tourism Organization (UNWTO)

According to the UNWTO [32], local regulations are a useful tool for controlling overtourism in Art Cities and world heritage sites. It suggests a set of topics for setting new rules, including the opening times, traffic restrictions during specific periods, promotion of pedestrian-only zones, drop-off zones for coaches in suitable places, and tax setting for online tourism accommodation services. The report also recommends supporting these actions with analysis of the city's carrying capacity and critical areas and attractions. The collected good practices related to regulation develop only some of these topics, particularly tax setting and tourist accommodation. So, it is essential that cities also place their attention on other issues as well. Each destination should also define a strategy for Visitor Management that would spread the tourist flows far from the Historical Centers. Perhaps cities that have faced overtourism have realized the need to develop such local regulations. However, spreading the tourist flow is still a common strategy for mitigating the pressure on Historical Centers.

## 3.1.2. The United Nations Organization for Education, Science, and Culture (UNESCO)

According to the UNESCO World Heritage Sustainable Tourism Toolkit [38], the management plan requires the telling of the story of the host community to drive visitors to a better understanding and respect for the local community. At the same time, local communities should be involved in the decision process and develop a model to share the benefits of tourism instead of just experiencing pressure. Sustainable tourism development has not only the aim to create prosperity and material gains, but also, and in particular, to improve well-being and the residents' quality of life. Therefore, understanding conflict, both current and potential, between visitors and residents is essential for the sustainable tourism debate [39]. Tourism is an opportunity for communities and their people to share the benefits of tourism. For this reason, it is essential to stress community engagement so that residents confront fewer problems from tourism.

## 3.1.3. United Nations Environment Program (UNEP)

According to the UNEP Guideline [40], sustainability in tourism requires smart approaches with emerging strategies and proper tools that facilitate the implementation of those strategies. Although the UNEP guideline mainly addresses governments, it encourages all public authorities to support the private and non-governmental organizations to ensure the long-term sustainability of the sector and its trade associations.

# 3.1.4. The Selection Criteria

Lastly, as introduced in Table 2, the shared report by Santiago de Compostela introduces four subthemes for the selection of best management practices, including Regulation (R), Visitor Management (VM), Community Engagement (CE), and Environment (E) [37].

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<b>Table 2.</b> The applied subthemes for the selection of best practices.
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No.	Subthemes	Focus
1	Regulation	The review of local regulation, as suggested by the UNWTO.
2	Visitor Management	To expand visiting areas and improve the image of the place.
3	Community Engagement	To involve local communities in the decision process.
4	Environment	Current and future sustainability of the environment.

#### 3.2. Best Practices

In addition to the selection criteria, some factors were taken into account by the partners during the selection of best practices, including the coverage of more challenges, transferability, scalability, accountability, completeness, representativeness, and innovation. Finally, the total of nine shared practices by the Atlas partners—Bordeaux (3), Edinburgh (1), Florence (3), Porto (1), Santiago de Compostela (1)—were classified into the specified subthemes (Table 3).

Table 3. The shared practices by the partners to manage overtourism in Art Cities.

City	<b>Best Practices</b>	Subthemes
	Control of tourist accommodation	R
Bordeaux	Webzine Un air de Bordeaux	CE
	Bordeaux barometer	VM
Edinburgh	Doors open day	VM
	UNESCO regulation	R
Florence	Mobile analytics	VM
	Firenze Card, and Firenze Card+	VM
Porto	Tourist tax	R
Compostela	Women's environment	VM, CE

# 3.2.1. Bordeaux

### Control of Tourist Accommodation

According to the head of the Bordeaux tourism department, the tourist accommodations have increased due to the suitable condition of the city's infrastructure and development of the renting offers through online booking platforms. The conversion of houses into tourist accommodations has increased housing prices in Bordeaux in recent years. In July 2017, a political decision was made to support the provision of affordable housing for residents. Hence, two regulations—2017/488 Bordeaux Métropole (change of use) and 2017/268 Council of Bordeaux (registration number)—have come into force since March 2018 to protect the diversity of the population and to control the ratio of tourist properties to local housing in the historic center. These regulations consider the ratio between the numbers of official registered tourist accommodations with the current in the city as the indicator. According to these regulations, any furnished short-term rental accommodation is subject to the supply of a similar-sized dwelling in the same sector, including a parking space. Any rental of furnished tourist accommodation is subject to a declaration via the website of the tourist tax of Bordeaux Métropole. Any offender renting illegal tourism accommodation is liable for penalties of up to 50,000 EUR in fines (civil law) and 80,000 EUR in penalties (penal law). Until March 2019, almost 2406 properties were registered on the Visitors' Taxation portal, of which 1544 hosts have been registered since March 1, 2018. This increase reflects the obligation of the accommodation providers to register, even if there are still thousands of housing offers with no registration numbers. The extensive negotiation extends to online booking platforms, which began to remove accommodation ads that do not present a registration number.

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## Webzine Un Air de Bordeaux

The Bordeaux Métropole's Conference and Tourist Office have started Un Air de Bordeaux, a webzine dedicated to the inhabitants of the urban area and visitors wishing to explore the region and its natural resources off the beaten track. This strategy manages the visitor flows more efficiently and promotes the metropolitan area as a whole. It supports community-oriented tourism that shares local attractions in a way that respects the place and its inhabitants, all in the process of identification and development. It is a strategy based on vicinity, authenticity, sincerity, simplicity, sharing, and open-mindedness [41].

## Bordeaux Barometer

The tourist barometer of Bordeaux Métropole is a multi-stakeholder tool, co-built by institutional and professional actors, including Bordeaux Métropole, the tourist office and congress of Bordeaux Métropole, the City of Bordeaux, the Regional Committee Tourist Office (CRTA), Gironde Tourisme, Bordeaux-Mérignac Airport, and tourist and cultural facilities. This tool collects statistics and data that are collaboratively provided by stakeholders, including museum visitors, site attendance, and tourist arrivals. Furthermore, every month, a statistical analysis is carried out by the Chamber of Commerce and Industry to estimate the number of visitors at each destination.

# 3.2.2. Edinburgh

# Doors Open Day

The Doors Open Day is Scotland's largest free festival, celebrating cultural heritage and the built environment. Since 1990, every September, this program has been welcoming the local community to see inside historic buildings. As a part of the European Heritage Days, this program promotes opportunities for cultural exchange among Glasgow and other Scottish cities for local interest rather than tourists. The program occurs annually to build up a sense of association and ownership of cultural heritage.

# 3.2.3. Florence

# Mobile Analytics

The main aim of the project is to monitor the population flow in the Historic Center of Florence. The project collects data from mobile operators in Italy to understand the use of the city by people. Mobile analytics is a novel method, since similar experiences are not known at a municipal level, and only a few of them at a broader territorial level.

## Regulation

This Regulation intends to pursue the protection of the Historic Center of Florence by considering the factors and behaviors that cause damage to the aspects of general interest, such as public health, civil coexistence, urban decorum, the historic urban landscape, and the cultural–historical identity of the city center. The regulation applies some limitations or prohibitions for the opening of new activities at the Historic Center of Florence. More specifically, this measure puts a three-year pause for the opening of food and beverage services and fixed retail outlets of foodstuffs. Exceptions are provided for places of culture, libraries, theatres, cinemas, and museums, where these activities can be continued.

# FirenzeCard and FirenzeCard+

Firenze Card is an official ticket for visiting museums in Florence. The project was formulated to advance an integrated system of cultural services that allows entrance to 72 museums, historical

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monuments, villas, and gardens, holding priority access. The Firenze Card+ is an additional ticket for transport services and offered products by the local economic operators.

#### 3.2.4. Porto

#### Tourism Tax

The Municipality of Porto created the Tourism Tax based on existing models in Portugal (Law no. 73/2013). Porto's Municipal Tourism Tax was created to minimize the challenges caused by the significant growth of tourism in the city. It has served as a form of financing to improve a set of activities and investments, such as environmental preservation and promotion of historical and local commerce in the city.

## 3.2.5. Santiago de Compostela

# Women's Environment

The city of Santiago de Compostela has designed a comprehensive tourism model for providing a convenient environment for various women's groups who visit the city, such as pilgrims and conference attendants, as well as for those who work in the many companies related to this sector, among which are:

- 1. The improvement of an accessible, inclusive, safe, and attractive environment for women.
- 2. Inclusive use of language and non-discriminatory terms for women in different media, including menus, advertising, letters, social networks, web pages, and management documents.

#### 4. Discussion

International tourist arrivals have grown since 1950, and the UNWTO predicts that international tourist arrivals will reach 1.8 billion worldwide by 2030. The tourism industry plays a vital role in the sustainability of Art Cities due to job creation, income generation, and boosting of livability in historical sites. On the other hand, overtourism threats the livability conditions in Art Cities and World Heritage Sites, and it is incompatible with the principles of sustainable tourism, which attempts to create a more pleasant place for both residents and visitors. Overtourism is a complicated and multi-dimensional phenomenon that threatens the residents' quality of life in historic sites. In recent years, the uncontrolled growth of international tourism has increased the physical pressure on transportation services, public spaces, and museums [20]. This phenomenon has led to the emergence of various problems in Art Cities in terms of security concerns, city accessibility, and environmental sustainability [42]. Art Cities have a limited capacity to adapt to mass tourism and are fragile to the consequences of globalization. Overtourism can easily affect the social, economic, and environmental conditions of these places, and, in worsening scenarios, it can lead to conflicts between residents and tourists. Thus, site managers must pay attention to the strategies that boost the residents' quality of life and mitigate the impacts of overtourism on Art Cities. Therefore, the common disturbances that can emerge from overtourism can be stated as:

- 1. Livability conditions: Affordable accommodations and tourist noise pollution;
- 2. City accessibility: Overpopulated streets and city centers;
- 3. Physical pressures: The burden on city infrastructures;
- 4. Security concerns: Drunken behaviors and stealing;
- 5. Environmental sustainability: Current and future sustainability of the environment.

The analysis of the Atlas selection criteria shows that most of the Art Cities suffering from overtourism have developed their management plans by using the subthemes of Local Regulations and Visitor Management. Nevertheless, the Atlas partners have applied different approaches to these subthemes that generate different strategies. For instance, through local regulations, Florence has restricted the opening of new commercial activities in the city center. The city applies mobile technology

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to monitor the tourist flows and develops promotional offers to mitigate the pressure on its historic center. The application of local regulations in Bordeaux, however, is somehow different, as it focuses on tax rules for tourist accommodation. According to the Bordeaux regulations, any furnished short-term rental accommodation should supply a similar-sized dwelling in the same sector, including a parking space. The city adopts a community-oriented tourism approach, which shares local attractions in a way that respects the place and its inhabitants. Bordeaux also benefits from statistical analysis to estimate the number of visitors at each destination. The created tourism tax model in Porto serves as a form of financing that promotes local commerce in the city. In Edinburgh, visitor management strategies promote new opportunities for cultural exchange among Glasgow and other Scottish cities for local interest rather than for tourists. Santiago de Compostela has designed a comprehensive tourism model based on genders and improves the condition of the environment in favor of various women's groups who visit the city.

The review of the shared strategies in Atlas reveals the fact that although these practices have been a step forward for managing overtourism, sustainable tourism is not only linked to control of the pressure generated by international tourism; rather, development of the current model is necessary. Such a model should combine the economic growth derived from tourism activities and social and environmental sustainability, considering that these topics mutually interact and cooperate [43]. In the analysis of Atlas, we also recognized deficiencies in existing strategies that can affect the overtourism phenomenon and decrease the quality of life in Art Cities. These dimensions are presented in the following.

#### 1. Environmental concerns

While many of the current strategies distribute tourists outside of the city center, no good practices have been found regarding environmental sustainability during the Atlas project. It is possible to formulate some hypotheses to explain this lack of practices:

- 1.1. The environmental impact in tourist city destinations could not be adequately measured, and not all sites have an observatory to monitor the effect.
- 1.2. It is challenging to distinguish between environmental impacts due to tourists and the ones due to residents.

It has been revealed that the international recommendations are only partially followed; in particular, only Visitor Management and Community Engagement follow linearly through what is internationally suggested. Good practices related to Regulation are more numerous than the others, but are very focused on tax and tourist accommodations. Concerning environmental conservation, this subtheme needs to be monitored more by Art Cities.

# 2. Climate change impacts

The tourism industry is considered to be highly vulnerable to climate change. However, the effects of climate change on tourism have not yet been extensively quantified [44]. Moreover, some researchers discuss that the highest vulnerability exists in regions where tourism growth is expected to be the strongest [45,46]. Therefore, vulnerability levels of Art Cities to climate change should be assessed [47] and be considered in tourism development plans [45,48]. By reducing environmental attractions, climate change can affect the balance of tourism in a region and raise pressure on some destinations.

# 3. Crisis management

Although the restriction of new commercial activities in city centers has been applied as a tool for the management of overtourism, the consequences of these decisions on the economic indicators of Art Cities require further study. Art Cities and, in particular, World Heritage Sites should develop strategies for managing tourism in times of social and economic crisis. The tourist-crisis plan should Sustainability **2020**, *12*, 3929 9 of 11

be identified based on the specific features of each destination. It can develop based on multiple possibilities, such as accessibility barriers due to festivals, losing tourist flows due to climate change, and spreading of disease in Art Cities due to international tourists. Therefore, the development of a crisis plan is of particular importance for the economic and social sustainability of Art Cities.

# 4. Cultural plans

There is still a significant knowledge gap in terms of availability of both quantitative and qualitative data on the phenomenon of cultural heritage tourism and on understanding of its contributions towards cultural, economic, and social development in Europe. Therefore, the creation of innovative quantitative and qualitative methods will improve our understanding of the impact of cultural tourism on European economic and social development [49], which can promote our insights for dealing with overtourism in Europe.

# 5. Conclusions

As forecasted by the UNWTO, international tourist arrivals worldwide are expected to reach 1.8 billion by 2030. The tourism industry is one of the largest economic sectors worldwide, and it promotes economic development in cultural heritage sites. However, many Art Cities and World Heritage Sites have limited capacity to adapt to the growing tourism trend. Overtourism affects the sustainability of Art Cities in various ways and poses a severe threat to the residents' quality of life. In this regard, the strategies that site managers apply to control tourism in Art Cities are of great importance. In 2019, the European project of Atlas World Heritage was launched to identify the best management strategies to overcome overtourism in Art Cities, with the participation of five Art Cities, including Florence, Edinburgh, Bordeaux, Porto, and Santiago de Compostela. The partners suggested a total of nine best practices for managing overtourism in Art Cities. The Atlas findings open up reflections for regulations that can displace tourist accommodations away from the city centers, apply mobile technologies for monitoring tourist flows, and offer a discount for introducing lesser-known sites to reduce tourism pressure on the historical centers. The analysis of Atlas also highlighted some neglected dimensions in the proposed strategies that can affect the socio-economic sustainability of Art Cities. These factors can affect the overtourism phenomenon and decrease the quality of life in Art Cities, namely environmental concerns, climate change impacts, crisis management, and cultural plans. For instance, while spreading tourist flows to the outside of the historical centers is likely an efficient strategy, no good practices were identified in terms of environmental sustainability by the Atlas partners. Finally, Art Cities need to develop innovative quantitative and qualitative methods in line with the European economic and social development programs. These studies can enhance our understanding of the socio-economic impacts of overtourism on Art Cities and generate more efficient management strategies.

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