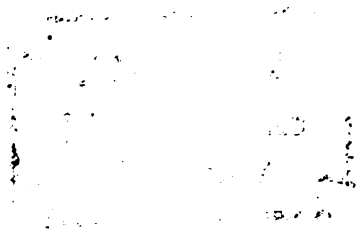
THE BIRTH CONTROL CLINIC, OUTPATIENT ABORTION AND FAMILY PLANNING SERVICES-- A DESIGN APPROACH

Thesis for the Degree of M. A.

MICHIGAN STATE UNIVERSITY
SONIA RUIZ STAFKO

1975



ABSTRACT

THE BIRTH CONTROL CLINIC, OUTPATIENT ABORTION AND FAMILY PLANNING SERVICES--
A DESIGN APPROACH

By

Sonia Ruiz Stafko

The problem addressed in this project is to determine the basic interior design elements, the size and interrelationships of the interior spaces, for a highly specialized structural facility--a combined outpatient abortion clinic and family planning center. The Birth Control Clinic is a hypothetical facility offering first trimester abortions along with contraception and related family planning assistance. The goal of the project is to demonstrate a design approach adaptable to the requirements of either a public or private facility offering such services.

The procedural steps followed in arriving at a solution were: first, obtaining an understanding about the nature of the activities to be accomodated by the facility; second, analyzing existing facilities and charting the spatial requirements for such activities; and third, adapting the

activities' spatial requirements to the needs of this particular facility.

These procedural steps culminated in a floor plan illustrating the optimal utilization of interior space for the Birth Control Clinic.

THE BIRTH CONTROL CLINIC, OUTPATIENT ABORTION AND FAMILY PLANNING SERVICES-- A DESIGN APPROACH

By

Sonia Ruiz Stafko

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Human Environment and Design

1975

TABLE OF CONTENTS

ILLUSTRATIONS AND CHARTS

I

INTRODUCTION

In 1970 President Nixon established the Commission on Population Growth and the American Future headed by John D. Rockefeller III. The Commission warned that although the birth rate in the United States has declined it must be slowed still further. The report dealt with a range of special problems but its most striking recommendations concerned birth control:

> A new federal law should be enacted to help . . . set up population, sex and birth control education programs.
>
> State laws that restrict access to contraceptive information and supplies should be eliminated and such materials should be available to minors.
>
> Present laws restricting abortion should be liberalized along the lines of the New York state statute, which permits abortion on request.[1]

Of course the recommended legislation was never introduced. A variety of parochial state laws continued to restrict women's ability to obtain contraceptives, information about contraception, and abortion. The presidential commission's

---

[1] Time Magazine, March 27, 1972, vol. 99, no. 13, p. 71.

argument that "all women have a moral right to freedom to control their own fertility,"[2] went unheeded by the legislature due to perceived political antagonism to such reform.

However, as is often the case where an idea whose time has come is ignored if not stifled by one branch of our government, another will come to the rescue. In this instance, it was the judiciary. By extending the Bill of Rights to include protection from state interference with a woman's right to decide whether or not she shall bear a child, it invalidated state laws prohibiting her from exercising that right. The Supreme Court decision of Jane Roe v. Henry Wade, decided January 22, 1973, held that the Texas statute, and by implication all similar state statutes proscribing abortion except for the purpose of saving a mother's life, was an unconstitutional denial of an individual's rights protected by the Ninth and Fourteenth Amendments of the United States Constitution.

The Jane Roe decision was preceded by and in part is based upon Griswald v. Connecticut, a 1965 Supreme Court decision invalidating as unconstitutional state laws prohibiting the dissemination of contraceptive or information about contraceptives.

These two decisions have come at a time when the social and economic climate increasingly demands that families plan for their children. The accommodation of this demand in

---

[2] Ibid.

respect to both contraception and abortion, having been recognized as a Constitutionally protected right and thus legal throughout the United States, can now be planned for by public and private professionals in light of accepted medical practices and public demands. Contraception and abortion need no longer be associated with shame and danger. A relatively new area of medical and social science is now accessible to investigation and development, and a demonstrated need of the general public can and will now be accommodated. The subject of this project is based on the premise that the role of birth control in our society looms large in the near future. It can be anticipated that the demand for such services will increase, based on observations of national and world demographic, social, and economic pressures. Recent public opinion polls indicate increased recognition of these circumstances, and encourage speculation that well financed, government-backed birth control programs such as those envisioned by the President's Commission may yet become a reality.

Such services, be they publically or privately supplied, will require facilities. Facilities need designing. This project is a design approach for such a facility.

II

OBJECTIVE AND JUSTIFICATION

The objective of this project is to demonstrate an approach to the interior design of a highly specialized facility--an out-patient abortion clinic and family planning center, hereafter entitled the Birth Control Clinic. The objective is not to design the facility per se. Rather, it is to illustrate the necessary first steps in formulating such a design. The sum of these first steps should be an understanding of the factors which determine the size and interrelation of the interior spaces. The one interior design element upon which all others rest is the determination of space. Before the architect begins to design his structure, the spacial requirements of the human endeavor enclosed within must be thoroughly examined and charted out. The chartographer in this instance is the interior designer, who supplies the architect with information necessary for him to choose his course of construction. This project attempts to illustrate such a chart, that is, a matching of a given human endeavor with a structural arrangement that optimally fulfills that endeavor's spacial requirements.

The justification for adopting the Birth Control Clinic as the subject of this thesis is grounded in its

topicality. Only very recently has the subject of birth control in general, and abortion in particular, emerged from under the cloud of misinformation, taboo, and illegality. It is also an area where interior design has not yet been given the consideration it should, but where it soon shall.

Regardless of one's personal predilections, none will deny that there is a demand for such services. Before legalization, this demand was met in a largely haphazard, dangerous, and socially destructive manner. In the 1960s, maternal deaths caused by botched illegal abortions in the United States averaged over three hundred a year. In 1973, it has been estimated over 745,000 abortions were performed in this country, and over 900,00 in 1974. However, in 1973, it was evident a good number of illegal abortions were still being performed due to a lack of access to abortion facilities in many areas; twenty-five of the fourty-seven abortion related deaths that year resulted from illegally performed abortions.[3]

In Michigan there is a similar demonstrated demand. In 1971, before the Roe decision and legalized abortion in Michigan, and during the first full year of New York's pioneering abortion statute, sixty-one percent of 262,807 reported New York abortions were performed on women from

---

[3]"The Abortion Trade," Detroit Free Press, February 4, 1975, p. 1-C.

out of state.[4] It is estimated that a good ten percent of that number came from Michigan, or as many as 15,000. The present demand is estimated to be between 25,000 and 30,000 per year.[5] It is also estimated that three or four abortion clinics in the Detroit metropolitan area, along with two or three outstate, each with a first trimester abortion (abortion within the first twelve or so weeks of gestation) capacity between twenty and twenty-five a day would adequately serve Michigan's present needs.[6]

In summary, there is a demand, in Michigan, for pregnancy termination services, and by logical implication, for pregnancy prevention services. This demand is not currently being met in an adequate fashion. The need for adequate services, and for facilities to house them, is imminent.

---

[4] "New York Abortions," Detroit Free Press, August 31, 1973, p. 1-C.

[5] Interview, William Stien, Director, Planned Parenthood, Inc., Detroit Chapter, March 5, 1974.

[6] Ibid.

III

REVIEW OF LITERATURE

The unique focus of this project--a design approach for the spatial relationships of a birth control clinic performing outpatient abortions and other family planning services--precludes much drawing upon analysis and findings of prior studies. Although much has been written on contraception and abortion, there appears to have been little published concerning the design of facilities for these services. Existing family planning services are universally low on government priorities and are consequently underfunded. They are sequestered in "available existing space," which is often inadequate to the proper function of the service. Similarly, abortion clinics, being a relatively new phenomenon in an area of law and medicine that is rapidly changing, heretofore have been only a functional part of existing hospitals or at best an adequate remodeling job of a building designed for some other purpose. Thus the author has relied to a large degree on interviews, analysis of existing family planning and abortion facilities and analysis of the functional aspects and personnel requirements of such services as those offered in the Birth Control Clinic.

However, as stated, much has been written regarding the functions of our proposed facilities. A general review of these functional areas will be a beneficial background to the designer.

The prevention of an unwanted birth may be affected at two points: before conception by contraception, and after conception by abortion. For obvious reasons, the former is the more preferable of the two methods. But unfortunately abortion plays, and will continue to play for the foreseeable future, an important part in any comprehensive birth control program. The following is a brief survey of general information on each of these two birth control methods.

Contraception

Methods

Home remedies commonly in use today include the douche, withdrawal, and the "rhythm method." These are considered 69%, 75% and 75% effective, respectively. Still in wide use and available without prescription are spermicidal foams and jellies (80% effective), condoms (86% effective), and diaphragms (88% effective). Intrauterine devices (IUD), the "pill," and sterilization which require medical consultation and prescription, are 86%, 99% and 99.9% effective, respectively.[7] At present, oral

---

[7] Sex, A Better Understanding (pamphlet), Community Sex Information and Education Service, P.O. Box 2858, Grand Central Station, New York, New York 10017 (1971), pp. 72-74.

contraceptives account for approximately 25% of all contraceptive practice in the United States, approximately eight million as of 1967. "Although use . . . is highest among young women with a college education, there is a general consensus among clinicians that almost all women, including those with a limited education, can be taught to take them with reasonable consistency, and that this method of birth control has proved acceptable to many couples who had been unwilling . . . or unable to use (traditional methods)."[8]

The estimate of IUDs inserted in the United States ranges between one and two million. Because of their small expense, and lower risk of "patient failure" (conscientious and consistent application by the patient is required for the other popular methods), the IUD has become the mainstay of many family planning programs abroad--most notably in India.[9]

History

Greeks, Romans and Islamic cultures all possessed knowledge of contraception through artificial means.[10] But the modern birth control movement--limited in the present discussion to contraceptives--begins with Thomas Malthus' Essay on the Principle of Population. Malthus concluded that

---

[8]Christopher Tietze, Modern Methods of Birth Control: An Evaluation, Basic Books Inc., 1969, p. 187.

[9]Ibid.

[10]Norman St. John-Stevas, Birth Control and Public Policy, Center for the Study of Democratic Institutions, P.O. Box 4068, Santa Barbara, California, 1960, p. 5.

population increases geometrically and that while technology will increase food resources, technology will eventually be left far behind; man is doomed to breed himself into perpetual strife and famine. Even considering the current drop in the national birth-rate, recent global projections bear out Malthus' gloomy predictions.[11,12] Although there are many complex variables to the overpopulation problem, population growth figures demonstrate the urgency of the situation (see Figure I, p. 11). The first doubling of population since 1750--an increase of 900 million--took 150 years, to 1900. The second doubling took 65 years, adding 1,630 million people. The third doubling, adding over 3,000 million, is projected to take place before the turn of this century--a period of under 35 years.[13]

While Malthus considered the momentum irreversible, in 1822 (24 years after Malthus' Essay) Francis Place pulished Illustrations and Proofs of the Principle of Population. Although Place essentially concurred with Malthus, he was not as fatalistic. He suggested there was hope through the use of contraception.

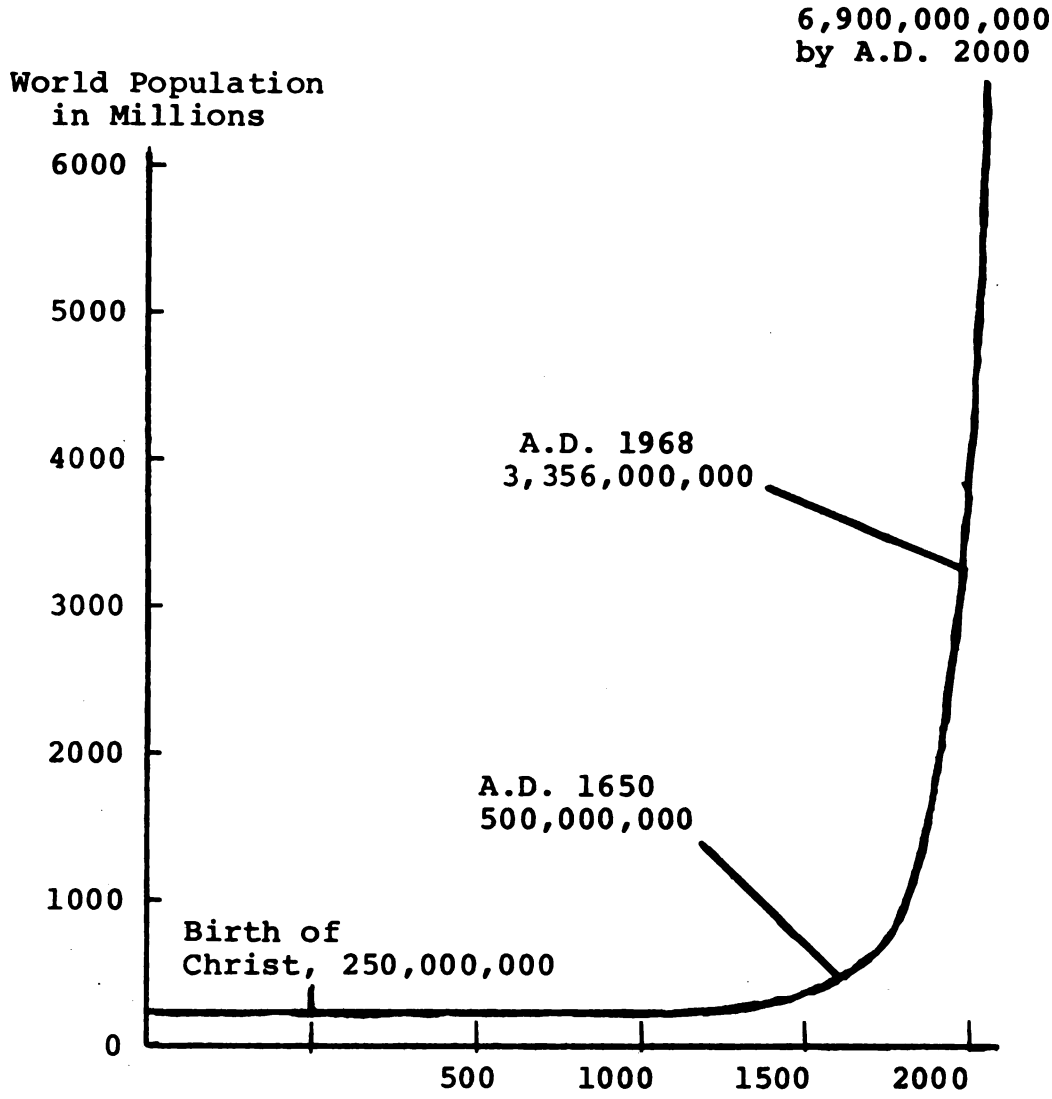
---

[11]"U.S. Babies Absent," Detroit Free Press, October 23, 1974, p. 4-C.

[12]Katherine A. Kendall, Population Dynamics and Family Planning, Council on Social Work Education, 345 E. 46th Street, New York, New York 10017, 1970, p. 74.

[13]Ibid.

FIGURE I. WORLD POPULATION GOES INTO ORBIT!



This chart is based on statistics from the Demographic Yearbook issued by the United Nations Statistical Office and Department of Economic and Social Affiars.

from Family Planning In An Exploding Population by John A. O'Brien (1968), p. 5.

Birth control and Malthus' theories soon became a popular topic of conversation among the educated, but by the mid-1800s Victorian religious and political elements (in both the United States and Britain) held sway. Religious edicts against the use of contraceptives were passed along with legislation banning the sale, distribution, and dissemination of information about contraceptives. Such laws spurred opposition and solidified the early birth control movement, but only recently has the movement with the aid of the courts, succeeded in overcoming most of these archaic laws.

In the light of changing attitudes within their congregation and clergy, even the Catholic Church has re-examined its position on the use of artificial means of contraception:

> The Second Vatican Council (1966) did not speak directly to any . . . methods (of contraception). . . . This is a different stand-point than that taken under Pope Pius XI some thirty years ago and his successor. We can sense here a clear development in the church. . . . It is advisable in such matters to . . . approach a doctor who can take all the varying circumstances into account and . . . decide what is medically best.[14]

Between 1966 and 1968 the United States government began to acknowledge the importance of family planning by enacting legislation creating and supporting family planning services. Federal family planning services were made available for military personnel and dependents (through

---

[14]Herder and Herder, A New Catechism, (Imprimatur), 1971, p. 304.

the Department of Defense), for Neighborhood Health Centers in low income areas (through the Office of Economic Opportunity), and for such civilian groups as American Indians and Federal Employees (through HEW).[15] A broader aspect of federal involvement, again through HEW, is the provision of funding to state and local government units who currently operate most existing family planning services.[16]

Abortion

Methods

Abortion, performed by an experienced professional is a relatively safe and simple procedure. In fact, today it is four times safer for a woman to have an abortion than to give birth; three times safer than a simple tonsilectomy.[17]

Abortions can be divided into two types: those within the first trimester of pregnancy where the two most common methods are dilation and curettage and vacuum aspiration, and those of later pregnancies where amniocentesis (saline injection) or hysterotomy is normally required. The latter procedures are much more serious operations and as currently

---

[15]Department of Health, Education, and Welfare, Family Planning (pamphlet), U.S. Government Office, Washington, D.C. p. 2.

[16]Ibid., p. 3.

[17]Garret Hardin, "Abortion and Human Dignity," The Case for Legalized Abortion Now, Diablo Press, Berkley, California 94717, 170, p. 72.

performed require access to the full range of emergency medical service and inpatient facilities generally found only in a hospital. However, new techniques in saline abortions adopted from Eastern Europe show promise of medically safe abortions for second trimester patients on an outpatient basis.[18] For the first trimester abortions, vacuum aspiration is a newer and safer technique than the old "D and C" (see Figure II, p. 15). Also developed in Eastern Europe, it can be performed safely in a doctor's office or clinic, requires little or no recuperation time, and as opposed to the D and C requires only local anesthetic.[19]

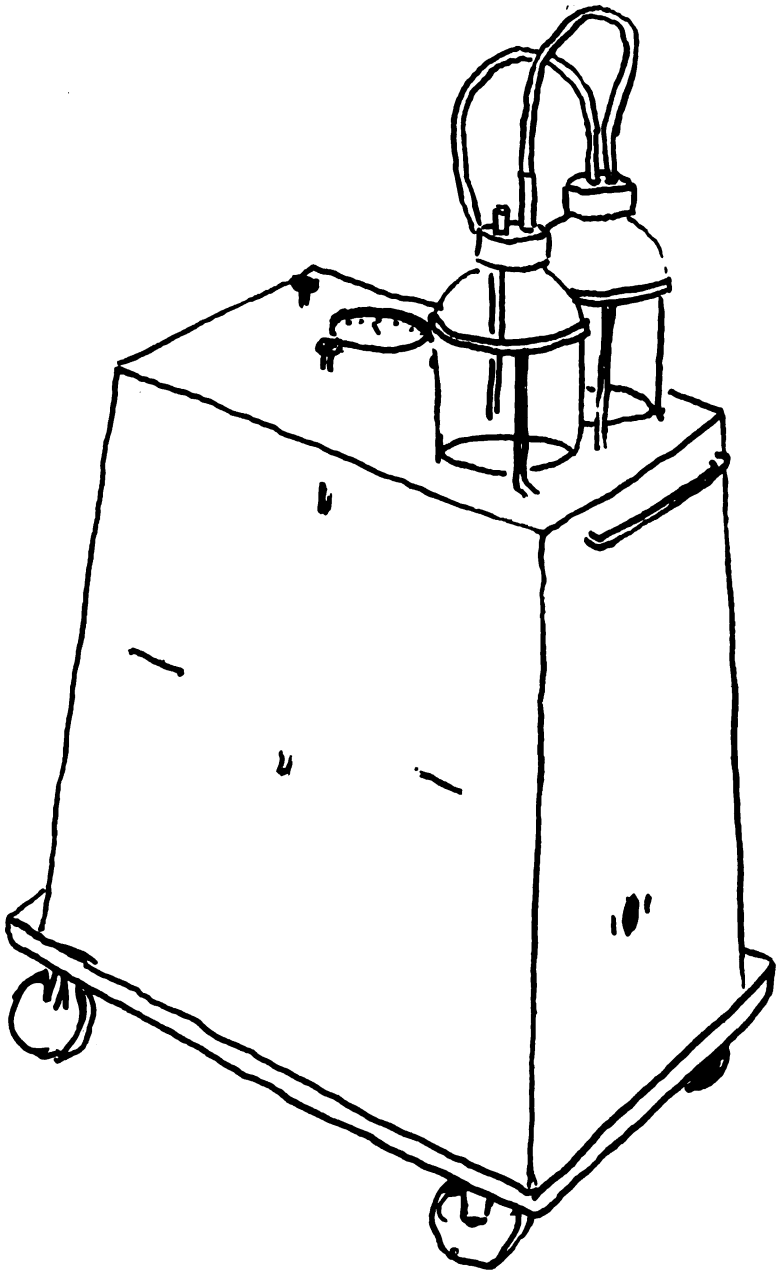
Most women report only minor discomfort during the procedure, similar to the discomfort of menstrual cramps. It has the advantage of simplicity of operation, less blood loss, and greater speed and cleanliness. Vacuum aspiration, when coupled with a vigorous educational program appears the best suited for the outpatient Birth Control Clinic. The procedure takes only a few minutes: first the doctor opens the cervix with a series of gradually widening round metal rods called dilators, then he inserts a hollow vacuum

---

[18]Benjamin E. Marbury, M.D., "Anesthesia in Abortions;" Legal Abortions in New York State: Medical, Legal, Nursing, and Social Aspects (July 1-December 30, 1970), Medical Department, Harper & Row, 1971.

[19]Thomas D. Kerenyi, M.D., "Outpatient Intra-amniotic Injection of Hypertonic Saline;" Legal Abortions in New York State: Medical, Legal, Nursing, and Social Aspects, Medical Dept., Harper & Row, 1971, p. 111.

FIGURE II. THE BERKELEY ASPIRATOR



tube (vacurette) through the cervix to the top of the uterus. This tube is connected with the suction device, which will gently pull away the uterine lining along with the fetus and placenta, which is deposited into a transparent receptacle which is placed outside of the vision of the patient. This procedure remains the easiest, quickest, and least expensive method.[20]

History

Historically, the practice of induced abortion did not concern state or religious authorities. Abortion was practiced by the Chinese as early as 2700 B.C. Aristotle recommended abortion of all women having the prescribed number of children or those over forty years old. During the days of the Roman Empire, induced abortion was widely practiced among all classes of women. Curetting with a varied assortment of instruments (scraping the fetus from the uterine lining), douches of hot--often caustic--liquids, and more traditional methods such as vigorous exercise and massages were employed with varying degrees of success.[21]

---

[20]Bernard N. Nathanson, M.D., "Suction, Curettage for Elderly Abortion: Experience with 645 Cases;" Legal Abortion in New York State: Medical, Legal, Nursing, and Social Aspects, Medical Dept., Harper & Row, 1971, p. 36.

[21]Leslie Corsa Jr., "Abortion, Yesterday, Today, and Tomorrow;" The Case for Legalized Abortion Now, Diablo Press, Berkley California 94717, p. 127.

Even within the last century, permissible abortion has been the rule rather than the exception in most non-western non-Christian societies.[22] This anomalie is usually attributed to the pervasive effects of Christian dogma on the cultural values of western nations. Given the ideal of asceticism, taboos built up around all matters "of the flesh." Also, Hebrew attitudes regarding womans' servient role in the society carried over into Christian beliefs. However, the principal theological objection to abortion stemmed from the doctrine of original sin; after much debate from within the church it was decreed that the fetus possessed a soul from the very moment of conception. Therefore, an aborted fetus "died unbaptised" and was thus doomed to eternal damnation. It appears that induced abortions still occurred, but canon law treated the act the same as murder. Through the Renaissance era, to be caught usually meant a sentence of death--unless, of course, one could afford to buy an indulgence or pardon.[23]

Today unfortunately, vestiges of this dogmatic adversion to abortion remain imbedded in the Western culture. But the Jane Roe decision and the trend in Western Europe point to a new era where complete family planning, including abortion, will be available to all. Many theologians are also

---

[22]Jerome E. Bates, Criminal Abortion, A Study in Medical Sociology, Chas. C. Thomas, Publisher, Springfield, Ill., 1964, p. 24.

[23]Ibid., p. 20.

becoming more flexible in their approach to abortion; Paul W. Rahmeier, chaplain at Dartmouth College, recently wrote:

> If our intention is to promote reverence for life, we should allow abortions in situations where the termination of fetal life would enhance human life. . . . Life is present in the earliest union of reproductive cells, but human life begins with birth. . . . To prohibit abortions places a premium on the quantity rather than the quality of human life. . . . [24]

Until the 1973 Jane Roe decision, the majority of American states still retained Nineteenth Century laws requiring strict medical necessity before a doctor could perform an abortion, i.e., the mother's life must have been in danger. Typical of this genre was Michigan's abortion statute, enacted 125 years before Roe invalidated it.

In 1967 Colorado became the first state to liberalize their abortion statute. It was patterned after laws that had been in effect for a decade or more in the Scandanavian countries. It permitted abortion on humanitarian and eugenic grounds (where a child would be born gravely deformed), where pregnancy resulted from incest or criminal assault, or where the birth would endanger the mother's physical or mental health, and provided that abortions take place in hospitals upon approval of three doctors.[25] By January, 1969

---

[24] Paul W. Rahmeier, "Abortion and the Reverence for Life," Christian Century Magazine, May 5, 1971, p. 558.

[25] Anthony Harden, Legal Abortion: The English Experience, Pergamon Press Inc., Elmsford, New York, 1971, p. 219.

North Carolina, California, Georgia, and Maryland followed suit. Later that year New Mexico, Arkansas, Kansas, and Oregon liberalized their abortion laws, and by May, 1970, so did Alabama, Hawaii, and New York. All the new statutes gave a large degree of discretion to the hospitals and doctors.[26]

The new state statutes were of varying degrees of liberalism and had different effects in their respective states. In conservative Colorado, two years after the enactment of the statute, hospitals concerned about their reputations (and financial resources) had denied twelve out of every thirteen abortion requests and had performed a total of only 800--making barely a dent in the estimated 5,000 illegal abortions which took place there during the same period.[27] At the other pole was California. With a similarly worded law, in the first year of operation, California hospital committees approved 91.9% of abortion applicants.[28] With the backing of California courts doctors had liberally interpreted the statute's requirement that there be "substantial risk that continuance of the pregnancy would gravely impair the physical or mental health of the mother" (emphasis added). This combined with the fact that the statute had no residency requirement made California

---

[26] Ibid.

[27] Ibid., p. 254.

[28] Ibid., p. 257.

the Mecca for women from the Western half of the United States who were seeking abortions.

The most liberal of the pre-Roe state abortion statutes was enacted by New York in July 1970. New York Penal Law, Section 125.05 states: "An abortional act is justifiable when committed upon a female with her consent by a duly licensed physician . . . within 24 weeks from commencement of her pregnancy."[29] There are no restrictions on residency, age, or place of abortion. However, the state and city health departments issued guidelines, and subsequently enforceable rules, for compliance with the new law. In October 1970 the New York City Department of Health enacted Article 42 to Title III of the city health code, perhaps the first truly comprehensive code covering abortion clinics. It specifies that pregnancies of duration longer than 12 weeks or those involving medical, surgical, gynecological, or psychiatric conditions or complications during or after the abortion, require inpatient facilities.[30] The Article sets forth the number, qualifications and duties of the staff, and the physical requirements of the facility. The Article also states that the abortion service shall have a social unit and family planning information available to the patients.

---

[29]State Statutes, Abortion in New York State: Medical, Legal, Nursing, and Social Aspects (July 1-December 31, 1970), Medical Department, Harper & Row, 1971.

[30]Mary C. McLaughlin, "Abortion Standards, New York City Board of Health;" Abortion in New York State: Medical, Legal, Nursing, and Social Aspects, Medical Department, Harper & Row, 1971.

Immediately after the Roe decision in January, 1973, a hodgepodge of abortion facilities opened in Michigan. As of 1974, there were about a dozen first trimester outpatient abortion facilities in the Detroit metropolitan area, plus at least one each in Lansing, Grand Rapids, and Kalamazoo. Of the twelve in Detroit, only three were tentatively approved by the 1973 National Organization for Women (NOW) survey. Up to September of 1974, NOW was the only organization investigating and rating abortion facilities in Michigan. In September, as part of an award winning series of articles exposing the disgraceful proceduresin and conditions of the abortion facilities in Metropolitan Detroit, the Detroit Free Press rated only one of the twelve even adequate.[31] The articles disclosed many abuses and found that a woman who goes to a Detroit area abortion clinic could not be reasonably sure of getting a safe abortion at a fair price:

> She risks getting an abortion she doesn't need (where there was no pregnancy). She may be treated by a person who is not a doctor. Her abortion may be performed under unsanitary, unsafe conditions that increase her chances of serious infection and hemorrage. She cannot be certain that she will receive counseling to deal with her emotional problems and to arrange for an

---

[31]Delores Katz, "The ABortion Trade," Detroit Free Press, September 8, 9, 10, and 11, 1974; September 10, 1974, p. 4-A.

> appropriate method of birth control. She is preyed upon by referral agencies whose only interest is the kickback they receive from doctors.[32]

Largely in response to the furor created by the Free Press articles, and within two weeks thereafter, a bill was drafted and passed into law by the Michigan Legislature which required the director of public health to establish a system of licensing for "freestanding surgical outpatient facilities," and to "promulgate rules . . . for the establishment, maintenance, and operation of the facilities as shall be necessary to accomplish the purposes of this act."[33] Section 8 of the Act goes on to state:

> After the effective date of this act, the owner or governing body of a proposed free-standing surgical outpatient facility shall submit plans of a proposed facility to the director for review and approval prior to the initiation of any construction project. . . . The review and approval shall assure that the proposed facility is designed and constructed in accord with applicable rules.

As of spring, 1975, the Michigan Department of Public Health (MDPH) has not yet enacted a final set of rules defining the parameters within which an outpatient abortion clinic must be designed, constructed, and operated. However, even prior to the Roe decision, the Department of Public

---

[32] Ibid., September 11, 1974, p. 3-A.

[33] Senate Bill 888, Reg. Session, 1974, Sections 1 and 6. The Bill was enacted and drafted as Public Act 1974, no. 247, and made effective October 3, 1974. The Act is statute number 331.461, et. seq., of Michigan Compiled Laws Annotated.

Health, in anticipation of possible legalization of abortion by referendum (defeated in the fall of 1972 election), compiled Recommended Guidelines for Facilities Performing Pregnancy Terminations. The MDPH Guidelines were published in February 1973, and go into great detail defining the various procedural and physical requirements for an optimal facility. It may be safely anticipated that the forthcoming Department of Health rules under the new statute may well be less stringent than the guidelines, which in not having the effect of law could be more idealistic in its approach. Nonetheless, the guidelines, based upon the expertise of an advisory committee composed of many well qualified individuals and representatives, and upon the known experiences of other states, together with other published materials, gives an important indication of what rules a Michigan abortion facility may soon have to adhere to, and in any case, should adhere to.

IV

PROCEDURE

Birth Control Center Functions

Our hypothetical facility, the Birth Control Clinic, provides two general types of service, pregnancy terminations and family planning assistance. There is reason for combining these functions into one facility. They are both directed toward and are essential aspects of one problem. Although unwanted pregnancies could almost always be prevented by the conscientious application of any number of proven contraceptive methods, according to one authority:

> It is probably safe to say the biggest single reason there is a market for abortions is lack of education and/or lack of desire to use contraceptive methods. Even with universal counseling and readily available contraceptives, abortions would still be required where a diagnostic mistake has been made, e.g., where the pregnancy was hidden by interference from menopause or drugs, or where there was rape or incest, or where there is a serious defective or deformed fetus.[34]

In any case, it is obvious that current methods of education and dissemination of contraceptives are insufficient; all too often the desire to prevent pregnancy is

---

[34]Interview, Carol Parks, Administrator, Michigan Clergy Counseling Service, August 14, 1973.

discovered only after conception, when only remedial measures can help. In that latter instance, sound medical practice requires the future welfare of the abortion patient be a part of the procedure, e.g., that to the greatest extent possible, she is advised on problems incidental and related to her unwanted pregnancy, particularly contraceptive methods, to insure that the relatively radical step of abortion will not again be necessary. Both the New York City Health Code, a statutory model on the subject of outpatient abortion facilities, and the MDPH guidelines recognize the surgical procedure cannot be undertaken without more: thorough counseling is a vital addition to the surgical procedure.[35]

In reality, the weight given to each of these two general functions in planning space allocations will be

---

[35]New York City Health Code, Section 42.29 requires that "An abortion service shall have a social unit available to serve its patients adequately." Section 42.31 (e) and (f) state: "Interviewing and counseling by social service staff shall be made available to patients before and after abortions are performed. Family planning counseling by such personnel as may be prescribed by the physician in charge of the service shall be made available to patients before and after abortions are performed." The Michigan Department of Public Health Guidelines states, somewhat more broadly on page 15, that "pregnancy termination clinics should provide, through physicians, qualified nurses, social workers, and/or specially trained and qualified counselors for appropriate assistance and counseling for patients as needed. The clinic should maintain liason with community counseling, family planning, and other social and health agencies to assure appropriate and adequate subsequent care of patients. Arrangements should be made for the appropriate provision of contraceptives and/or supply, preferably originating in the clinic, with appropriate referral to other sources for any needed subsequent attention."

determined by many factors, most of which regard the client's needs, or perhaps, more accurately, the builder's motives and the source and amount of his capital. A general assumption might be made that a facility utilizing public funds, or perhaps foundation money, will be more "publicly" oriented, or in this case, more apt to devote greater time and space to counseling and the contraceptive aspects of family planning, whereas a facility that is strictly privately financed and operated, and is designed to be a profit-making venture, will be "profit-oriented," and inclined to stress the more remunerative surgery at the expense of counseling and family planning services. Although the writer is inclined to give more weight to the public service aspects of the facility, it is recognized that the still politically volatile nature of the services involved, especially abortion, indicates a facility with such a service mix is not likely to be publicly financed in the near future. Secretary of Health, Education and Welfare (HEW) Frank Carlucci, recently announced proposed abortion restrictions on federal funds heretofore available for abortions under the medicaid program, which number up to 278,000 per year. The proposed HEW rules are reported to have stated in part:

> The services and supplies (must) include at least physician's consultation, examination and continuing supervision; necessary laboratory examinations and tests, medically approved contraception through chemical, medical, or other means; and surgical procedures for voluntary

> sterilization. . . . Not included under this definition are abortions performed either for therapeutic (for the life or health of the mother) or non-therapeutic purposes.[36]

It is hoped cooler heads will prevail and that comprehensive public birth control programs including abortions will some day soon be a reality.

Aside from the ethical considerations and enacted rules and guidelines which mandate a portion of any facility offering abortions be dedicated to ancillary counseling, there is also a strong possibility that a birth control clinic as envisioned here, where each of the two birth control functions complement the other, could advantageously be constructed as either a private facility or as a "hybrid" public-private facility.

Some facilities such as the Twenty-Second Street Planned Parenthood Center in New York City, financed by government, private grants, donation, and fees, not only perform first trimester abortions, but also provide counseling on contraception, dispense contraceptives, and provide a full range of services for all aspects of pregnancy, genetics, infertility, venereal disease, and other sex related matters. Presently up to ninety percent federal matching funds are available for state supported facilities

---

[36]"HEW," Detroit Free Press, December 9, 1974, p. 2-B.

offering services and supplies related to family planning, excluding abortion. This suggests a possible means of combining the two functions, separately funded, into one facility to the mutual advantage of the state and the private investor.

In any case, the relative weight given to the two types of birth control procedures in the Birth Control Clinic shall be such that the design approach could be adapted, hopefully, to either a public or an enlightened private enterprise of a similar nature.

Aside from the general functions to be accommodated, other "givens" will help narrow the scope of our hypothetical problem to more workable dimensions.

First, having discussed some practical implications regarding financing, we will hereby, be fiat, leave all financing and budget problems behind. The design approach will hopefully be adjustable to variously financed projects with the same of similar goals.

Second, for the purposes of this project, we will restrict our attention to first trimester abortions. The

---

[37] Ibid. The Federal Social Service Act of 1972 requires states to provide family planning services, as opposed to allowing them discretion in the matter, if they wish to receive federal money for other related social services. This is due in part to the fact most states had previously ignored the prior act's "recommendation," which in turn made family planning assistance unavailable to the poor, who had no alternative but to add to already over-burdened welfare roles.

Supreme Court's Roe decision expressly prohibits state interference with a citizen's "fundamental right of privacy" unless there is a "compelling state interest." In the light of present medical knowledge, said the Court, this "compelling state interest," is nonexistent before the second trimester of pregnancy, "because of the now established fact . . . that until the end of the first trimester, mortality in abortion is less than mortality in normal childbirth." After the first trimester, up to the point of viability of the fetus, the state may impose regulation only "to the extent that regulation reasonably relates to the preservation and protection of maternal health."

Furthermore, from a medical point of view, only first trimester abortions may be consistently performed on an ambulatory basis, thus allowing for an outpatient service, one available to a greater number of patients at less cost.

The Michigan Department of Health Guidelines state, on page 18,

> Only uncomplicated first trimester pregnancies . . . can be safely terminated outside a hospital. All terminations beyond the first trimester of pregnancy and all those with a recognized potentially hazardous medical complications regardless of state of gestation, should be performed on an inpatient basis in a hospital.

Article 42 of the New York City Health Code similarly restricts outpatient abortion services to first trimester pregnancies.

Third, the abortion capacity of our facility will also be determined somewhat arbitrarily; it is to be fifteen abortions per day. Based on an estimated 25,000 to 30,000 abortions per year in Michigan, a facility averaging seventy-five abortions a week, or 3,900 abortions a year, could service approximately one million people, or one-eighth of the estimated Michigan demand.

Finally, we will locate our facility in Michigan not only because of the demonstrated need, but because of the fact that it is essential to establish a jurisdiction in which the facility is to be built; the simple reason being that every state, and many counties and municipalities, have different laws and regulations which will have a direct impact upon the direction of one's design program.

Study of Existing Models

The first step taken in the design approach for the Birth Control Clinic, was to study the function-space relationships in existing facilities. This entailed the study of two separate types of facilities, family planning centers and abortion clinics. In each case the patient flow, the procedures, and the space used was charted out.

The family planning center, 701 North Logan Street, Lansing, Michigan, was the model for Flow Chart A, entitled "Existing Family Planning Center," Figure III, page 31. The chart describes the facility, step by step, in three chronologically concurrent parts: 1) patient flow, a word or

FIGURE II, FLOW CHART A

EXISTING FAMILY PLANNING CENTER

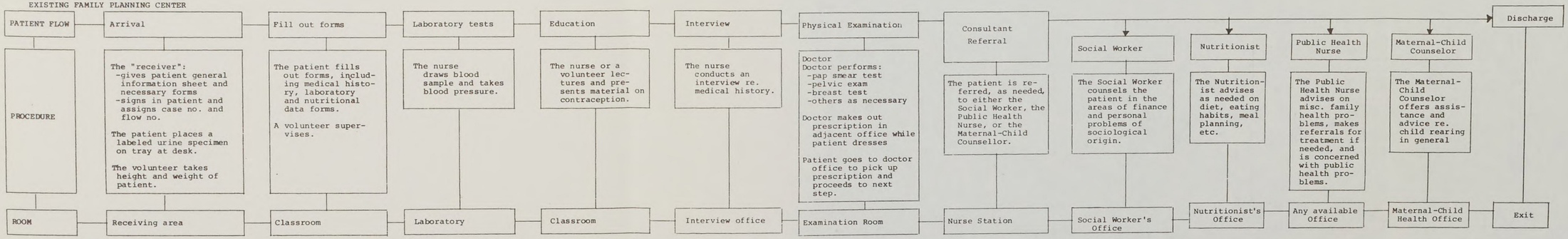
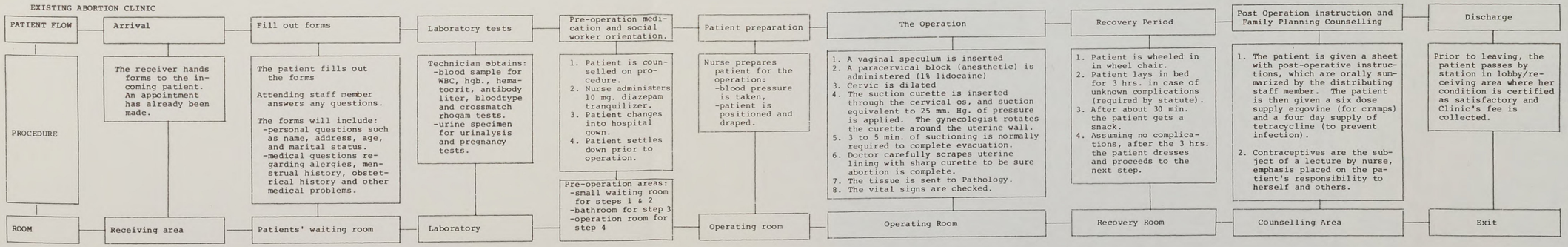


FIGURE IV, FLOW CHART B

EXISTING ABORTION CLINIC



phrase description of each procedural step; 2) procedure, a detailed description of the procedures that are performed at that step; and 3) room, a word or phrase description of the space in which the aforementioned procedure takes place. Reading from left to right, each step from arrival to discharge is chronologically identified, described, and located in a distinct space.

In addition to the charted information, some other observations about the Lansing facility will assist in assaying its applicability to our project.

The Lansing Family Planning Center is a typical public contraceptive dissemination and information facility, with a limited capacity for ancillary social service functions. It employs at various times a coordinator, two doctors, four nurses, a medical student, seventeen other staff members, and thirty-five volunteers. The center is financed by the federal government (approximately two-thirds) and Ingham County (approximately one-third). Although open to all county residents, the location was selected for its close proximity to the Model Cities neighborhood, where reside the highest concentrations of low income families for whom public assistance is required in obtaining family planning counseling and contraceptives. The center is currently assisting about 6,000 people. An average of fifty people visit the center daily.

Unfortunately, the Lansing facility has many spatial deficiencies which become apparent both by general observation and by interviews with staff members. Some of these deficiencies are enumerated in the following paragraphs.

The Receiving area's main deficiency is in its lack of privacy for patients transacting what is their very personal business. This area includes a desk for the "receiver" who answers initial questions and instructs the patient on the order of procedures which will be followed through the center. The patient hands in a labelled urine specimen which has to have been brought in from home for a laboratory analysis. The seating for waiting patients is near the desk and everything transpiring at the desk can be heard by anyone else in the room. The adjacent area where two receptionists receive phone calls and make appointments is also open; private conversations are impossible. Further depersonalization is fostered in that the height and weight measurements are also conducted in this same receiving area.

The classroom is set up for educational purposes, but the absence of a room for filling out the requisite forms has made it necessary to use this room for the latter purpose to the exclusion of the former. The classroom also serves as a waiting room for laboratory test results and the subsequent interview.

The laboratory facilities are limited to pregnancy tests. Blood samples, and cultures, and urine for complete urinalysis, must be sent to another laboratory for testing. This restricts both the scope and efficiency of the center's services.

There are two interview offices for three interviewers. Since again, privacy must be maintained, the odd interviewer must look about for some unused yet relatively private space in which to talk to the patient.

The patient next goes to one of four examination rooms, assuming one is open; if not, she waits in a waiting room. Only one examination room has an adjacent bathroom, which all patients must use prior to examination. More and better located bathrooms would be helpful.

There is one office for the doctors and one office for all the social workers. Here again is a problem of lack of privacy during consultations.

The clinic coordinator has an office, but because of the interviewers' and social workers' lack of space, the office is frequently used by the latter as well as by the public health nurse who has no other space to work out of when she is at the facility. The administrator needs her own office.

The preceding paragraphs reflect on the use of the individual rooms. Generally those problems noted are due directly to lack of funds for the space required, which is a

situation plaguing most such facilities and is beyond the scope of this paper. But to the extent these problems are due to poor use of the existing space, identifying them is a useful means of determining a more appropriate plan for the Birth Control Center.

It appears that little or no attention has been paid to the planning of traffic patterns in most existing facilities. The criteria for what function takes place where, appears not to be in its relation to the other functions but rather depends solely on what space is available. In the Lansing facility, as no doubt in others, this criteria for relating space to function leads to inefficiency and confusion along with a proportionate loss of a desirable aura of professionalism and patient confidence. Thus our first step is to analyze the functions of the facility in relation to each other. Flow Chart A, based on the Lansing Family Planning Center illustrates a method for such an analysis.

Flow Chart B, entitled "Existing Abortion Clinic," Figure IV, page 31, is structured in a fashion similar to Flow Chart A. Reading from left to right, each step in the first term abortion procedure is chronologically 1) identified; 2) described in detail, and 3) located spatially as the process takes place in an existing facility.

Obtaining an adequate model for Flow Chart B presented some difficulties for the writer. After discussing Detroit area abortion clinics with informed people and after visiting

two area clinics,[38] it became depressingly evident that not only was the typical Michigan abortion facility physically inadequate--generally a sparingly remodelled older building--but the abortion procedures employed were themselves generally open to much criticism, ethical and medical, as has been discussed.[39]

Organizationally, the procedures might charitably be termed informal and often resulted in confusion of both staff and patient.

The principal catagorized procedural functions--receiving, administration, consultation, examination, surgery, and recovery--were mixed and matched in various combinations, both procedurally and spatially, resulting in varying degrees of inefficiency and confusion. The common structural and procedural focus more often than not appeared to be expediency, to the derogation of many other and no less important considerations.

Therefore, a more adequate model to draw upon was sought and found in Women's Services, a New York facility.[40] In

---

[38]Summit Medical Center, 1400 W. McNichols, Detroit, Michigan, visited April 1974; Women's Health Service, 16001 Grand River Avenue, Detroit, Michigan, visited April, 1974.

[39]See "Abortions, Assembly Line Style--The Abortion Trade," Delores Katz, Detroit Free Press, Sept. 10, 1974, p. 3-A. p. 3-A.

[40]Women's Services, 424 East 62nd Street, New York, New York, visited, July, 1973.

operation since 1971, it is still a model facility of its kind. Prior to the legalization of abortion in Michigan persuant to the 1973 Roe decision, and for a good time thereafter, this facility was the principal destination for referrals from the Michigan Clergy for Problem Pregnancy counseling, the major non-profit Michigan abortion referral agency.[41]

Located in midtown Manhattan, Women's Services occupies the first floor of a building which was completely gutted and remodelled. It accommodates between twenty and twenty-five first trimester vacuum aspiration abortions per day, and incorporates progressive counseling. The procedures and flow patterns of this facility are described in Flow Chart B, and can be summed up as follows.

A large foyer, apart from the lounge area, contains a receptionist--or receiver--who checks in the patient and gives her the requisite forms to be filled out. Appointments have been made in advance and proof of pregnancy obtained prior to that day. The patient proceeds to an adjacent, modern, well-lit and comfortable lounge area. It is large enough to accommodate all patients and a reasonable number of accompanying friends and relatives, and is divided up into intimate groupings which allow for a welcome degree of privacy for filling out of forms and waiting. The patient is

---

[41]Interview (Ibid.), Administrator, Michigan Clergy Counseling.

then called into a small examination room where a blood sample is taken, blood pressure is measured, and a urine specimen is taken. An adjoining bathroom is provided for the latter function. Afterwords, the patient returns to the lounge area until a counselor is available, who then takes her into a small counseling room with space enough for a desk and chair and privacy. The patient is interviewed, her medical history and other forms are reviewed, and she is counseled on the entire abortion procedure to follow. She is then led to a small patient-only lounge area while awaiting the actual surgery. When called, she proceeds into a pre-operation room where she changes into a hospital gown. Clothes and personal effects are put into a plastic bag which is taken by the attendant to the post-operation recovery area. Valuables have been left behind or with friends or relatives in the waiting room. An adjacent lavatory is available for any last minute needs. Meanwhile the laboratory tests have been made, and they and the patient's medical history are reviewed by the doctor. Having previously been given a mild oral sedative, the patient proceeds into the operating room where she is given a local anesthetic and then undergoes the operation. Afterwards the doctor prescribes appropriate antibotics and other medication and instruction as required. The patient is then taken into the recovery room. If she feels too weak to walk, she is taken by wheelchair. Each of the recovery rooms has

five to six beds with a nurse stationed inside each at a desk. After three hours, if there are no complications, the patient dresses and goes into a counseling area where she is given instructions, post-operative care, and a brief lecture on contraception. The patient is then released by the nurse, and she goes to the office where the bill is paid.

The Women's Services facility is well designed, and the spaces fit the function well by almost any criteria. The one possible criticism of the facility stems not from its design, but rather from the limited purposes for the design. It was set up to serve transient patients, many if not most from out of state, as opposed to serving a particular community. The whole procedure is one day, and the operating rooms are underutilized because the doctors are unable to commence operating until after the paperwork and test results of the first patient are ready.[42] Furthermore, the one-shot surgical procedure, though well handled, cannot adequately address the broader aspects of the patient's problems. This requires family planning counseling on a continuous basis.

Having thus charted out existing procedures for the two separate facilities, as well as pointing out their respective

---

[42]Since the author's visit to New York in July, 1973, the New York City Health Code has been amended to require an interval of not less than two days between initial examination and the termination of pregnancy.

deficiencies, there remained only to adopt these procedures to the Birth Control Clinic, which combines both of the functions.

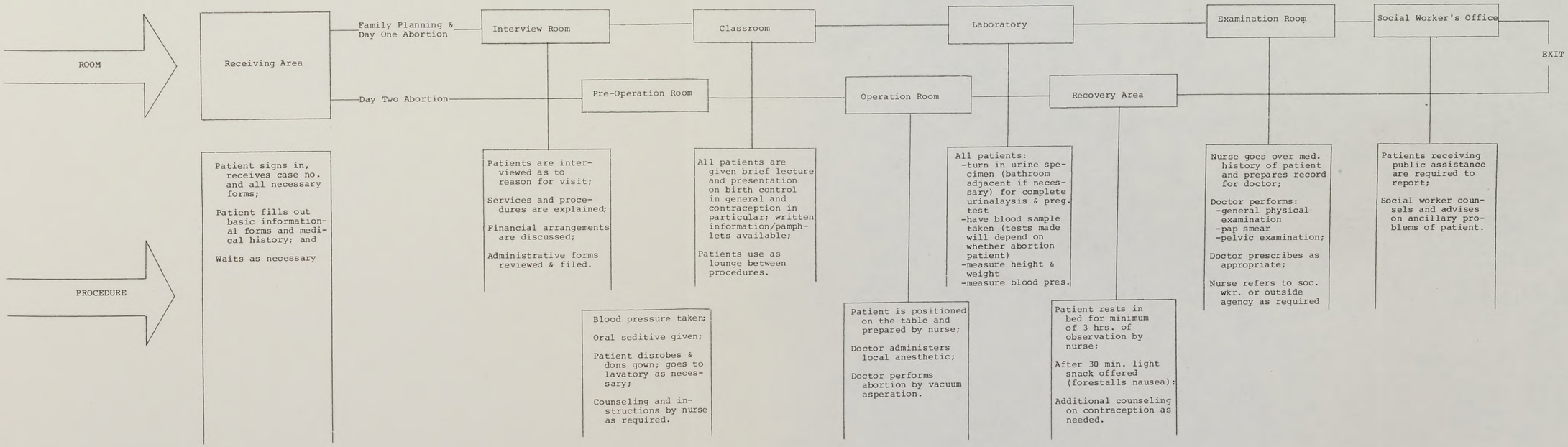
Procedural Flow Chart

The existing procedures for family planning assistance and for abortion as illustrated by Flow Charts A and B are overlapping in many respects, including much of the same administration, paperwork, explanations, and laboratory tests, and the birth control counseling and education itself. The proposed Birth Control Clinic, by advantageously combining the two functions in one facility, eliminates much duplication in furtherance of a common goal: efficient, comprehensive, and personal birth control services.

Flow Chart C, Figure V on page 41, shows in graphic form how the two existing facility types could be combined into one facility. The proposed Birth Control Clinic procedures are charted room by room. The patient flow is divided into family planning and those elements common to the abortion procedure, and the surgical and recovery elements of the abortion procedure which are organizationally, medically, and ethically better accommodated apart from and on a day subsequent to the examination and the other procedural elements. The two day abortion procedure allows for better scheduling and utilization of the abortion facilities; it provides time for all recommended tests to be completed and

FIGURE V, FLOW CHART C

THE BIRTH CONTROL CLINIC



properly analyzed prior to the operation, it allows the impulsive patient additional time to reconsider, and creates an ambience more in keeping with our stated community service --vice "abortion mill"--goals. Beneath and connected to each specified room is an itemized and self-explanatory list of the procedures taking place therein. The following paragraphs outline the Birth Control Clinic procedures from the point of view of a typical patient.

When a patient comes to the Birth Control Clinic for contraceptive or other family planning services apart from pregnancy termination, she will enter the receiving area, sign in, receive the appropriate forms, and then fill out the forms. The receiving area includes an adjoining waiting area. The patient is then taken by her interviewer into an interviewing room where she will be advised of the services available, sign her medical release if required, and arrange for payment of services, e.g., medicaid. Any questions or problems of a general nature she may have at that point can be resolved. She then proceeds to a classroom where general birth control instruction will be given. The classroom can also serve as a patients' lounge for waiting as necessary. The patient then proceeds to the laboratory where she is given the necessary tests. Next, a nurse interviews the patient and takes a complete medical history, and afterwards accompanies the patient to the examination room. She then is given an interval pelvic examination and has a pap smear

taken by the doctor. The physician will then issue appropriate perscriptions. If the patient is in need of social service assistance, as determined at her initial interview, she will be referred to a social worker. If no referral subsequent to examination is required, or if so, after completing that conference, the patient may proceed to the exit and have her prescription filled and pay her fee at the reception desk.

When a patient comes to the Birth Control Clinic for an abortion, the procedure will be, of course, more complex. The procedure will be divided into two days; the Day One procedures will generally be the same as those for non-abortion patients, with the actual operation on Day Two.

Day One: Patient arrives at the receiving area and follows the procedures as outlined for non-abortion patients. Although the procedures are essentially the same for all patients on the initial visit, abortion patients will fill out additional medical forms and undergo additional laboratory tests including a white blood cell count, hemoglobin, hematocrit, pregnancy determination, complete urinalysis, blood typing, antibody titer, and cross match rhogham when necessary. Also recommended are tests for rubella, gonorrhea, and sickle cell (for blacks).[43]

---

[43]MDPH Guidelines, pp. 23-24, and 28. Title III, New York City Health Code, Section 42.31 (d).

Day Two: The patient checks in with the receptionist, and follows the second day schedule as described in Flow Chart Three; it is limited to the actual abortion procedure and recovery.

Capacity

After having charted out the Birth Control Clinic procedures and the several spaces in which they take place, it is necessary to make an analysis of its proposed capacity, i.e., to determine the size and number of such spaces. To this point, the only definite figure established is the number of abortions to be performed each day--fifteen. Although another point of reference, such as total physician time available or the budget might serve as well, the capacity, based on the number of abortions per day, will be our starting point. The entire Day Two procedure for abortions (see Flow Chart C, Figure V, page 41) should take approximately four hours and ten minutes. The preoperation procedure wherein the patient receives an oral sedative (usually valium), disrobes, goes to the lavatory, and has her blood pressure taken, requires thirty minutes, which is also about the same amount of time required for the sedative to take effect. The same preoperative space will serve for two or three patients at a time, which will allow for some mutually beneficial discussion and support.

The total time required for the procedures in the operating room is approximately twenty minutes. First a nurse will position, prepare, and drape the patient, then a local anesthetic, generally a paracervical block, is administered by the doctor. Within a minute, the patient is sufficiently anesthesized. It takes another minute or so for the cervix to be dilated and the suction currettee to be inserted. Three to five minutes of suction is normally required for evaction. A sharp surette is often carefully used after the suction to insure abortion is complete. The aborted tissue is removed to laboratory for pathological examination, and the patient's vital signs are checked before she is taken to the recovery room. The doctor prescribes the necessary antibiotics and other medications.

Although most patients are without pain and might safely leave shortly after the operation, the standard medical and legal requirement is that she be closely observed for a minimum of three hours before she is released.[44] Patients are encouraged to have light snacks, which helps to forestall fainting, nausea, headaches, as well as being necessary nourishment for patients kept for over three hours of observation. Clothes are withheld to discourage patients from leaving prior to their dismissal.

---

[44]MDPH Guidelines, p. 34; New York City Health Code, Section 42.33 (f).

Thus adding thirty minutes preoperation, twenty minutes operation, and three hours recovery, we get three hours and fifty minutes. To this is added twenty minutes slack time for scheduling difficulties and movement between spaces, for a total of four hours and ten minutes. Assuming the clinic is open approximately eight hours a day, with one hour off for lunch, the maximum daily patient capacity will be eight per operating room per day as illustrated by the Operating Room Scheduling chart, Figure VI, page 47.

The operating room is the one space in which only one patient at a time can be accommodated during the abortion procedure and therefore, is easiest to quantify: for fifteen abortions per day, we will need at least two operating rooms with a capacity of eight abortions per day each.[45]

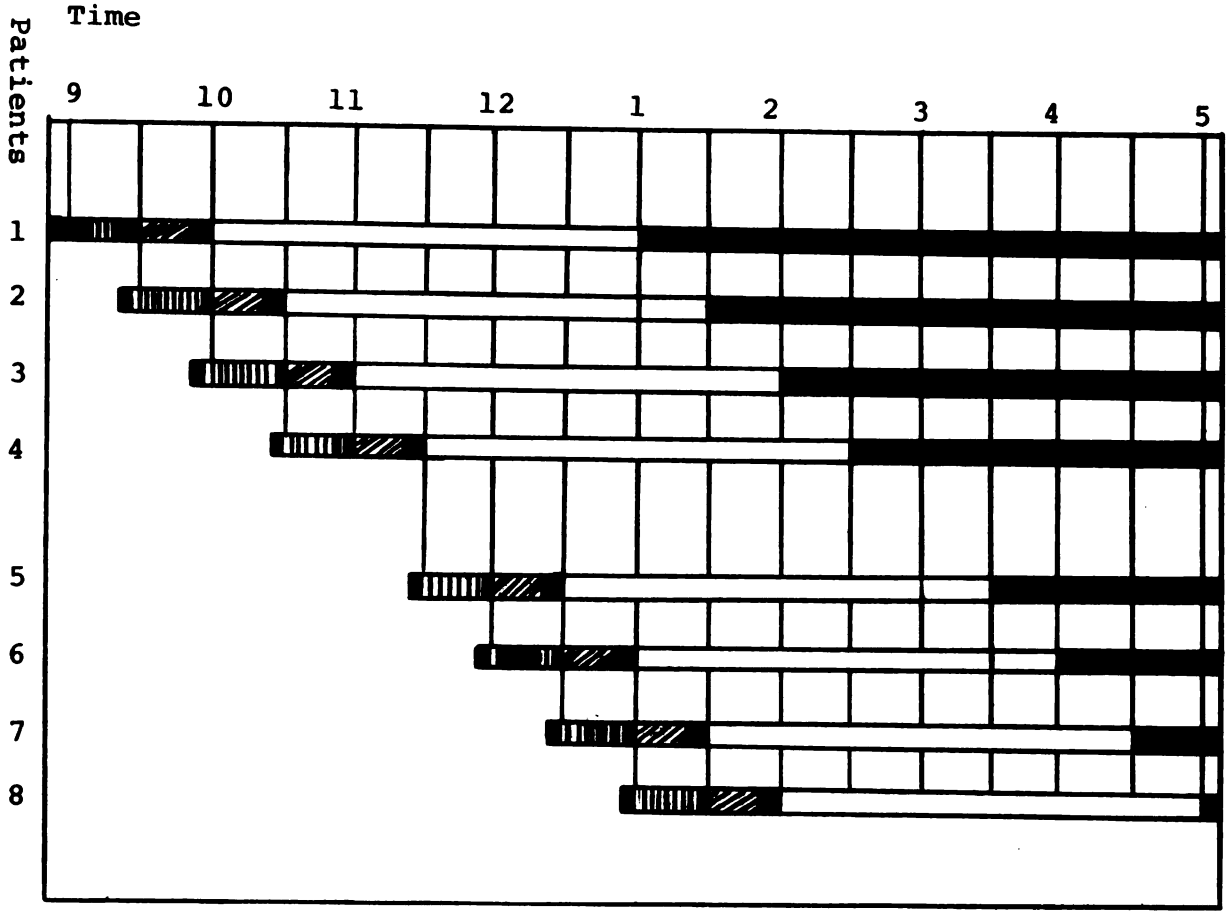
The preoperation room will be provided for all Day Two abortion patients. By referring to its function as stated (see Figure V, page 41), it can be seen that the maximum of two or three patients at that stage of the abortion procedure could easily and conveniently be accommodated in one space.

Recovery rooms are quantified not only by reference to the three hours requirement, but also by other existing legal

---

[45]The complication rate for first trimester abortions under appropriate clinical conditions has been found in one survey to be 11.7 per 1,000 abortions, or about one percent, and each complication is estimated to require an additional amount of time equal to the abortion itself; "An Operational and Planning Staffing Model for First and Second Trimester Abortion Services," Mark D. Mandel, M.P.A. American Journal of Public Health, Vol. 64, No. 8, Auguest, 1974, p. 760.

FIGURE VI. OPERATING ROOM SCHEDULING CHART



KEY:

Pre-Operation--30 min.

Operation--20 min.

Recovery--3 hrs.

Slack Time

standards. The MDPH guidelines provide that the maximum number of bed patients per room should be four. Thus allowing for some time overlap, there should be bed space for each of the sixteen patients, which requires a total of four recovery rooms.

Determining the number of spaces for the Family Planning and Day One abortion procedures is more difficult than for the Day Two abortion procedures. These procedures are much more flexible and thus less predictable and are not ammenable to precise documentation. Each patient will have her own set of circumstances and needs. However, some statistical information is available regarding staffing requirements, and hence spacial requirements, for facilities having a service mix similar to the Birth Control Clinic. The following procedural time requirements for each abortion patient have been calculated based upon a 1973 New York City Hospital Study.[46]

Reception, interview, and financial investigation	75 minutes
Medical History	25 minutes
Review of Medical History and Physical examination	25 minutes
Social Service (seventy-five percent of all patients requested abortions and sixty-five percent of those were referred to social service)	70 minutes

[46] Ibid., pp. 756, 759.

Assuming a similar patient population as with the New York survey, a 15-abortion-per-day clinic will require for the abortion patients alone, even given the staggered scheduling indicated in Figure VI, page 47, a minimum of three interviewing spaces, three social service spaces, two spaces for the taking of medical histories, and two examining rooms, plus the requisite laboratory facilities. The New York City Hospital Study found that seventy-five percent of all their patients requested abortions, even though a full range of family planning, counseling, and perscription was available. Assuming a similar ratio for our facility, we need a minimum total of four interviewing rooms plus two similarly structured medical history rooms, two examining rooms, and four social service spaces. In addition class-rooms, offering flexibility for educational and waiting spaces, are provided to allow further adaptability of the clinic to a family planning program, can realistically only be determined once the patient population needs and demands become established.

To this point, we have discussed capacity principally from the perspective of the patient. Of course, the staff's needs must also be considered. The New York Study was done in order to establish the staff requirements for such a facility. The study was based on statistics compiled over 22 month period from fourteen New York City general care hospitals offering abortion and related care services and

accounting for 13.3% of all of New York's abortions. The study converted these statistics into a staffing model which indicated the number of full time personnel required for the operation of a facility offering first trimester abortions and ancillary family planning services. By liberally interpolating the results of that study into our hypothetical facility, we can establish, in approximate figures, our personnel requirements. Categorized by function, they are as follows:

Administration	
Administrator	1
Clerical (including Interviewers)	11
Medical Screening	
Physicians	1
Professional Nurses (R.N.s)	2
Licensed Practical Nurse (L.P.N.)	1
Family Planning Counselors	2
Social Workers	4
Procedure (Day Two abortion)	
Physicians	2
R.N.s	2
L.P.N.s	2
Ward Coverage (Recovery)	
R.N.	1
L.P.N.	1
Laboratory Technicians	4
Housekeeping and Maintenance	2
TOTAL	36

This staffing model cannot, of course, be rigidly interpreted since its application would depend on many variables not ascertained or ascertainable in our hypothetical, including: the general physical condition and the education of the patient population, their needs for social service assistance, the availability of part-time or non-shift employees, and the mix of task assumption by employees, e.g., the amount of clerical functions performed by nurses or the amount of family planning counseling done by clerical interviewers, which is a difficult thing to measure in existing facilities much less hypothetical ones. Nonetheless, the model gives a reasonable basis for gauging the number of personnel required to staff the Birth Control Clinic and thereby is a means for determining the number and size of the remaining spaces in the facility, particularly the staff lounge and the administrative area.

To this point in the project we have discussed the functions of the facility, the procedural flow of the functions, and the capacity or size of the facility.

V

RESULTS--THE FLOOR PLAN

The floor plan is the culmination of the interior designer's initial research efforts, which should include investigation of the primary design ingredients of function, movement and capacity.

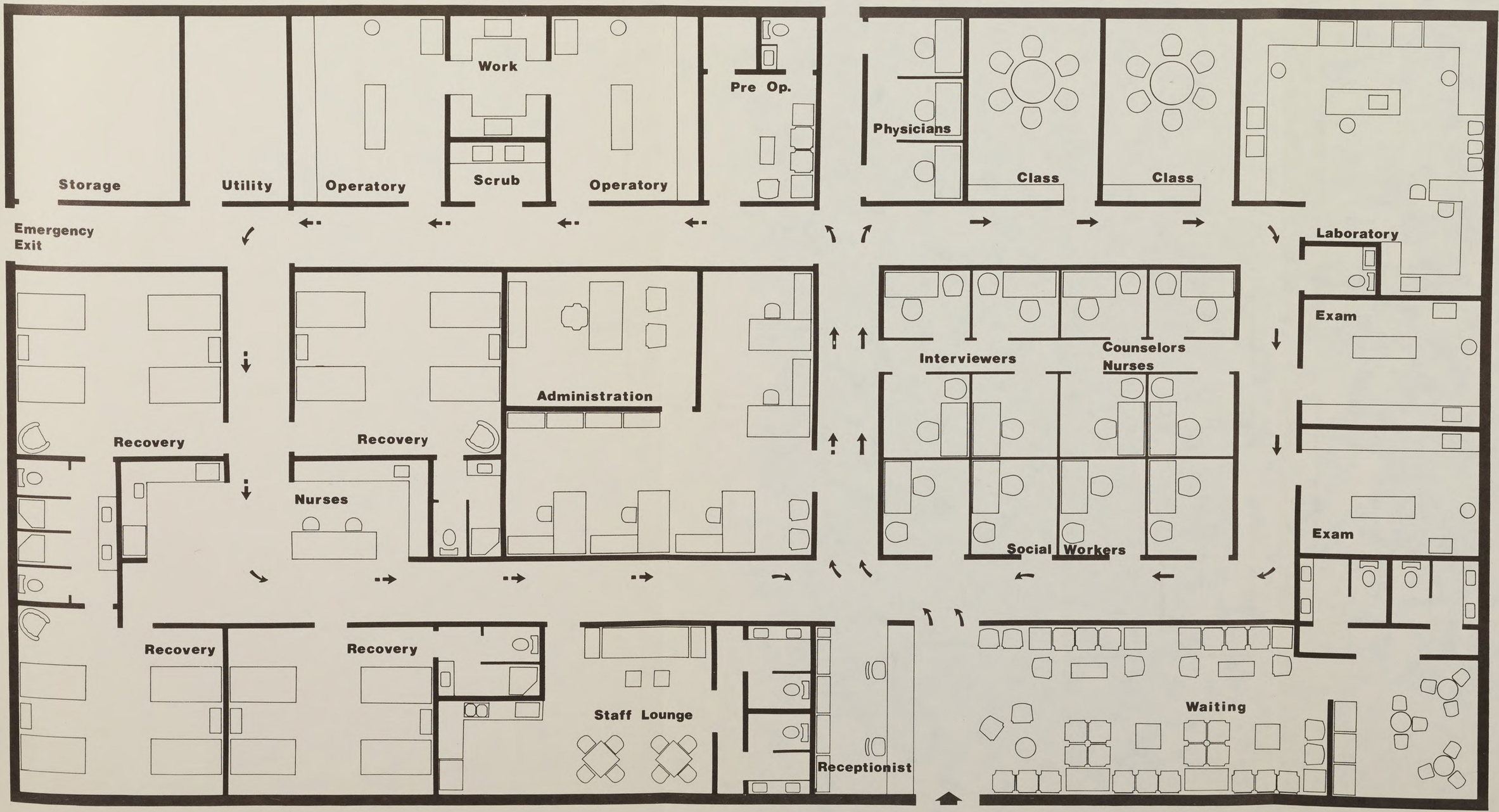
Figure VII, page 53, is the floor plan for the Birth Control Clinic. The most notable feature is the separation of the abortion Day One and family planning services from abortion Day Two. This spatial arrangement is not only to provide a better flow pattern, but is also designed for traffic control and sanitation purposes.

The reader may wish to refer again to Figure V, page 41, the Birth Control Clinic Flow Chart, regarding the precise procedures taking place in each space and the relation of each space to the others functionally.

The flow path for each of the two functions are represented on the floor plan by arrows, broken arrows for abortion Day Two and solid arrows for abortion Day One and family planning. Thus, in the latter instance the patient proceeds from the receiving area to an interview room to a classroom to the laboratory to a nurse's office to the examining room and, as necessary to a social worker's

FIGURE VII. FLOOR PLAN FOR THE BIRTH CONTROL CLINIC

→ Family Planning Assistance, Abortion Day One
·→ Abortion Day Two



o

i

t

a

r

e

a

r

A

l

a

r

o

a

t

w

u

p

v

f

l

w

office and back to the receiving area. In the former instance, the patient proceeds from the receiving area to the pre-operation room to the operating room to the recovery area and then back to the receiving area.

Other spaces appear in the floor plan that are not represented in Flow Chart C, they being ancillary, albeit essential, to the primary functions. Administrative spaces are located in the center of the facility, close to the reception counter and the interviewing-counselling area. Also close by are the doctors' offices and the employees' lounge. Adjoining the two operating rooms are a scrub room and a work area. Also provided are a supply and storage room, and abundant lavatories.

The following is a brief room by room description of the floor plan.

The receptionist's counter is situated by both doors and is therefore convenient and in a position to monitor traffic. The counter is located somewhat apart from the waiting area to allow for privacy.

The waiting area has a seating arrangement broken up into several groupings which fosters an ambience of privacy and comfort. Each grouping has end tables conveniently placed within and near it. A space is provided for vending machines and tables and chairs; lavatories are located off this part of the waiting area. The size of the waiting area should be sufficient to accommodate not only

the patients, but also a reasonable number of friends and relatives of the patients.

Upon being paged, the patient will enter the hallway off the waiting area, turn left and then immediately right, accompanied by her interviewer, and proceed up the center passageway, and then depending on the purpose of her visit, will either turn left to the pre-operation room or turn right into the interview area. The hallways are all six feet wide (except for one emergency exit) to provide sufficient room for the traffic and for the carts, wheelchairs and the occasional stretcher. We will first follow the flow path of the abortion Day One-family planning patient.

The four interview rooms are small and sparsely furnished with a desk and two chairs, one for the interviewer and one for the patient. The interview rooms and the adjacent nurses' and family planning counselors' rooms are comprised of movable partitions, which are sufficient to provide the required aura of privacy but which also allow for maximum flexibility in utilizing the entire space.

The classrooms are designed to be flexible from the beginning. They can be used for educational activities such as lectures, discussion groups and movies, for a waiting area for patients, and for other activities as required. Both are furnished with large tables, chairs and cabinets. The family planning counselors have separate offices adjacent to the interviewing rooms.

Immediately to the left of the classrooms are the doctors' offices. These utilize partitions and provide an area for the physicians to complete paperwork and keep personal records. These spaces are located between the principal work areas of the physicians.

Adjacent to the classrooms is the laboratory. It is sufficiently large to provide working space for the four technicians and for the patient or two with whom they may be working. In addition, the laboratory has space to store all the Clinic's drugs and medicines, including refrigerated medicines and plasma, and for a variety of medical equipment. Such equipment would include a centrifuge, a microscope or two with space for slides and petri dish cultures, and an autoclave for the sterilization of instruments. A lavatory is conveniently situated for patients to secure urine specimens.

From the laboratory the patient would if necessary return to a classroom until called by a nurse, who would then take the patient into a nurses' office, make a thorough investigation of the patient's medical history, and then accompany the patient across the hall to an examination room.

The examination rooms are large enough to allow ample working room for the doctor and his assisting nurse. The space is furnished with a gynecological examination table, a stool, a chair and a cabinet for medicines and instruments.

Along one wall is a work counter with storage cabinets below and a sink (pedal operated) at one end.

Across the hall from the reception area and sharing a common wall with the interview rooms and nurses' offices are the social workers' offices. Unlike the former, the social workers' spaces have fixed walls and are securable due to the fact the social workers would be keeping some of their records in their offices. Otherwise, these spaces are identical to the cubicles above.

After leaving the social worker, or the examination room, as appropriate, the patient would then exit by the reception counter where she could pick up her prescription if any and pay her bill.

Proceeding up the central hallway again, we first come to the administrative offices on the left. Five desks with ample typing and work space are provided for the clerical staff. A separate office is provided for the administrator.

Continuing back up the central hallway and turning left (through swinging doors) we come to the pre-operation room. The pre-op area contains a lavatory and a dressing room, and is furnished with several comfortable chairs and end tables.

The operating rooms are each furnished with an operating table, a stool and a cabinet. Additional space

is provided for the vacuum aspirator and for emergency equipment such as oxygen tanks.

Between the two operating rooms are two smaller spaces. The scrub room provides space for the physicians to don their gowns and wash up prior to and after each operation. Behind the scrub room is a small work area for the temporary storage of supplies and used instruments and tissue to be taken to the laboratory for examination. Soiled drape cloths and disposable paper products would be put into covered receptacles which would be emptied frequently and taken to the maintenance-utility room and the outside dumper, respectively.

The maintenance and utility room is an area for the storage of brooms, mops and other items required to maintain the proper sanitary conditions of the clinic. It also provides space for the temporary storage of soiled linen and if necessary non-organic disposables to be disposed.

The supply room is a space for the storage of clean paper products and linen, administrative supplies, and any other items of a non-medicinal nature for which such storage may be required. The supply room is conveniently located by a door where supplies can be delivered.

The exit at this end of the facility is also convenient to the operation and recovery rooms so that in the event a patient has complications of a serious nature she can

be easily taken out of the clinic and transported to a full service in-patient hospital.

The recovery area is composed of four recovery rooms centered around a nurses' station and food preparation space. The nurses' station is located so as to allow easy access to the patients' recovery rooms; it has a work counter for the completion of the necessary charts and records and has space for a sink and refrigerator. The food area might also have a refrigerator and sink along with a stove or hot plate and a microwave oven. Each of the recovery rooms has four standard hospital beds, two cabinets, and one chair, and is provided with its own lavatory with shower.

The staff lounge contains a kitchen area with refrigerator and stove, and ample counter space for food preparation and the inevitable coffee bar. Although furnishings would be a matter of some flexibility, two tables with four chairs each and a large sofa should be sufficient for the staff's breaks and lunch requirements. Lavatories are provided for the staff.

The patient would proceed, after being released from the recovery area, to the reception desk where she would pay her bill prior to departing.

VI

CONCLUSION

In conclusion, this project has attempted to demonstrate an approach to the design of a particular facility, The Birth Control Clinic. The goal of the design approach was the formulation of a floor plan. Certain assumptions were required to narrow the hypothetical facility to workable dimensions, however research and planning are the essential ingredients of not only this but all floor plans.

The floor plan, although the beginning of any given construction project, is or should be the end result of considerable effort on the part of the interior designer. The steps involved in formulating the floor plan for this facility, and suggested for the formulation of any floor plan, include: obtaining an understanding of the nature of the activities to be accommodated by the proposed facility; constructing flow charts which spatially segmentize the procedural elements of those activities; adapting those flow charts to the particular needs of your project; and establishing the capacity of the facility.

Following this design approach, especially when dealing with a highly specialized facility, should result in a floor plan that properly apportions and relates interior spaces to meet the actual needs of the client.

BIBLIOGRAPHY

"Abortion Trade, The." Detroit Free Press. February 4, 1975, p. 1-C.

Bates, Jerome E. Criminal Abortion, A Study in Medical Sociology. Springfield, Illinois: Charles C. Thomas, Publisher. 1964.

Corsa, Leslie, Jr. "Abortion, Yesterday, Today, and Tomorrow." The Case for Legalized Abortion Now. Berkley, California: Diablo Press. 1970.

Harden, Anthony. Legal Abortion: The English Experience. Elmsford, New York: Pergamon Press Inc. 1971.

Hardin, Garrett. "Abortion and Human Dignity." The Case for Legalized Abortion Now. Berkley, California: Diablo Press, 1970.

Health, Education, and Welfare, Department of. Family Planning. U.S. Government Printing Office, Washington D.C., n.d.

"HEW." Detroit Free Press. December 9, 1974, p. 2-B.

Katz, Delores. "Abortions, Assembly Line Style--The Abortion Trade." Detroit Free Press. September 10, 1974, p. 3-A.

Kendall, Katherine A. Population Dynamics and Family Planning. New York: Council on Social Work Education. 1970.

Kereny, Thomas D., M.D. "Outpatient Intra-amniotic Injection of Hypertonic Saline." Legal Abortions in New York State: Medical, Legal, Nursing, and Social Aspects. New York: Harper & Row, Medical Department. 1971.

Mandel, Mark D., M.P.A. "An Operational and Planning Staffing Model for First and Second Trimester Abortion Services." American Journal of Public Health LXIV (August 1974), p. 760.

McLaughlin, Mary C. "Abortion Standards, New York City Board of Health." Abortion in New York State: Medical, Legal, Nursing, and Social Aspects. New York: Harper & Row, Medical Department. 1971.

Marbury, Benjamin E., M.D. "Anesthesia in Abortions." Legal Abortions in New York State: Medical, Legal, Nursing, and Social Aspects. New York: Harper & Row, Medical Department. 1971.

Michigan Compiled Laws Annotated. Section 331.461, et seq.; Public Act 1974, No. 247, effective October 3, 1974.

Michigan Department of Public Health. Recommended Guidelines for Facilities Performing Pregnancy Terminations. 1973.

Nathanson, Bernard N., M.D. "Suction, Curettage for Elderly Abortion: Experience with 645 Cases." Legal Abortion in New York State: Medical, Legal, Nursing, and Social Aspects. New York: Harper & Row, Medical Department. 1971.

"New York Abortions." Detroit Free Press. August 31, 1973, p. 1-C.

New York City Health Code, Section 42.29.

"New York Statutes." Abortion in New York State: Medical, Legal, Nursing, and Social Aspects. New York: Harper & Row, Medical Department. 1971.

O'Brien, John A. Family Planning In An Exploding Population. New York: Demographic Yearbook, United Nations Statistical Office and Department of Economic and Social Affairs.

Rahmeier, Paul W. "Abortion and the Reverence for Life." Christian Century Magazine. May 5, 1971.

St. John-Stevas, Norman. Birth Control and Public Policy. Santa Barbara, California: Center for the Study of Democratic Institutions, 1960.

Sex, A Better Understanding. New York: Community Sex Information and Education Service. 1971.

Tietze, Christopher. Modern Methods of Birth Control: An Evaluation. New York: Basic Books, Inc. 1969.

Time Magazine. March 27, 1972, p. 71.

"U.S. Babies Absent." Detroit Free Press. Oct. 23, 1974, p. 4-C.